

Historic, Archive Document

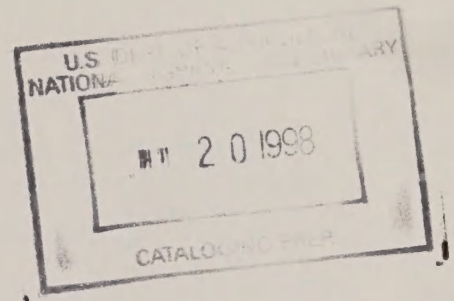
Do not assume content reflects current scientific knowledge, policies, or practices.

Reserve
aHD1761
.P67
1981

**United States
Department of
Agriculture**



National Agricultural Library



APPENDICES
FOR
THE PRODUCTION AND FINANCIAL STRUCTURE
OF U.S. FARMING

Economic Research Service
U.S. Department of Agriculture
Washington, D.C. 20250

December 1981

1
S. G. S. 18



APPENDIX 1.

Supporting Data For Farm Income Analysis

Each Decade		1940	1941	1942	1943
Plant and Soil Analysis		10.0	10.0	10.0	10.0
Soil: 1940-1941		10.0	10.0	10.0	10.0
1941-1942		10.0	10.0	10.0	10.0
1942-1943		10.0	10.0	10.0	10.0
1943-1944		10.0	10.0	10.0	10.0
1944-1945		10.0	10.0	10.0	10.0
1945-1946		10.0	10.0	10.0	10.0
1946-1947		10.0	10.0	10.0	10.0
1947-1948		10.0	10.0	10.0	10.0
1948-1949		10.0	10.0	10.0	10.0
1949-1950		10.0	10.0	10.0	10.0
1950-1951		10.0	10.0	10.0	10.0
1951-1952		10.0	10.0	10.0	10.0
1952-1953		10.0	10.0	10.0	10.0
1953-1954		10.0	10.0	10.0	10.0
1954-1955		10.0	10.0	10.0	10.0
1955-1956		10.0	10.0	10.0	10.0
1956-1957		10.0	10.0	10.0	10.0
1957-1958		10.0	10.0	10.0	10.0
1958-1959		10.0	10.0	10.0	10.0
1959-1960		10.0	10.0	10.0	10.0
1960-1961		10.0	10.0	10.0	10.0
1961-1962		10.0	10.0	10.0	10.0
1962-1963		10.0	10.0	10.0	10.0
1963-1964		10.0	10.0	10.0	10.0
1964-1965		10.0	10.0	10.0	10.0
1965-1966		10.0	10.0	10.0	10.0
1966-1967		10.0	10.0	10.0	10.0
1967-1968		10.0	10.0	10.0	10.0
1968-1969		10.0	10.0	10.0	10.0
1969-1970		10.0	10.0	10.0	10.0
1970-1971		10.0	10.0	10.0	10.0
1971-1972		10.0	10.0	10.0	10.0
1972-1973		10.0	10.0	10.0	10.0
1973-1974		10.0	10.0	10.0	10.0
1974-1975		10.0	10.0	10.0	10.0
1975-1976		10.0	10.0	10.0	10.0
1976-1977		10.0	10.0	10.0	10.0
1977-1978		10.0	10.0	10.0	10.0
1978-1979		10.0	10.0	10.0	10.0
1979-1980		10.0	10.0	10.0	10.0
1980-1981		10.0	10.0	10.0	10.0
1981-1982		10.0	10.0	10.0	10.0
1982-1983		10.0	10.0	10.0	10.0
1983-1984		10.0	10.0	10.0	10.0
1984-1985		10.0	10.0	10.0	10.0
1985-1986		10.0	10.0	10.0	10.0
1986-1987		10.0	10.0	10.0	10.0
1987-1988		10.0	10.0	10.0	10.0
1988-1989		10.0	10.0	10.0	10.0
1989-1990		10.0	10.0	10.0	10.0
1990-1991		10.0	10.0	10.0	10.0
1991-1992		10.0	10.0	10.0	10.0
1992-1993		10.0	10.0	10.0	10.0
1993-1994		10.0	10.0	10.0	10.0
1994-1995		10.0	10.0	10.0	10.0
1995-1996		10.0	10.0	10.0	10.0
1996-1997		10.0	10.0	10.0	10.0
1997-1998		10.0	10.0	10.0	10.0
1998-1999		10.0	10.0	10.0	10.0
1999-2000		10.0	10.0	10.0	10.0
2000-2001		10.0	10.0	10.0	10.0
2001-2002		10.0	10.0	10.0	10.0
2002-2003		10.0	10.0	10.0	10.0
2003-2004		10.0	10.0	10.0	10.0
2004-2005		10.0	10.0	10.0	10.0
2005-2006		10.0	10.0	10.0	10.0
2006-2007		10.0	10.0	10.0	10.0
2007-2008		10.0	10.0	10.0	10.0
2008-2009		10.0	10.0	10.0	10.0
2009-2010		10.0	10.0	10.0	10.0
2010-2011		10.0	10.0	10.0	10.0
2011-2012		10.0	10.0	10.0	10.0
2012-2013		10.0	10.0	10.0	10.0
2013-2014		10.0	10.0	10.0	10.0
2014-2015		10.0	10.0	10.0	10.0
2015-2016		10.0	10.0	10.0	10.0
2016-2017		10.0	10.0	10.0	10.0
2017-2018		10.0	10.0	10.0	10.0
2018-2019		10.0	10.0	10.0	10.0
2019-2020		10.0	10.0	10.0	10.0
2020-2021		10.0	10.0	10.0	10.0
2021-2022		10.0	10.0	10.0	10.0
2022-2023		10.0	10.0	10.0	10.0
2023-2024		10.0	10.0	10.0	10.0
2024-2025		10.0	10.0	10.0	10.0
2025-2026		10.0	10.0	10.0	10.0
2026-2027		10.0	10.0	10.0	10.0
2027-2028		10.0	10.0	10.0	10.0
2028-2029		10.0	10.0	10.0	10.0
2029-2030		10.0	10.0	10.0	10.0
2030-2031		10.0	10.0	10.0	10.0
2031-2032		10.0	10.0	10.0	10.0
2032-2033		10.0	10.0	10.0	10.0
2033-2034		10.0	10.0	10.0	10.0
2034-2035		10.0	10.0	10.0	10.0
2035-2036		10.0	10.0	10.0	10.0
2036-2037		10.0	10.0	10.0	10.0
2037-2038		10.0	10.0	10.0	10.0
2038-2039		10.0	10.0	10.0	10.0
2039-2040		10.0	10.0	10.0	10.0
2040-2041		10.0	10.0	10.0	10.0
2041-2042		10.0	10.0	10.0	10.0
2042-2043		10.0	10.0	10.0	10.0
2043-2044		10.0	10.0	10.0	10.0
2044-2045		10.0	10.0	10.0	10.0
2045-2046		10.0	10.0	10.0	10.0
2046-2047		10.0	10.0	10.0	10.0
2047-2048		10.0	10.0	10.0	10.0
2048-2049		10.0	10.0	10.0	10.0
2049-2050		10.0	10.0	10.0	10.0
2050-2051		10.0	10.0	10.0	10.0
2051-2052		10.0	10.0	10.0	10.0
2052-2053		10.0	10.0	10.0	10.0
2053-2054		10.0	10.0	10.0	10.0
2054-2055		10.0	10.0	10.0	10.0
2055-2056		10.0	10.0	10.0	10.0
2056-2057		10.0	10.0	10.0	10.0
2057-2058		10.0	10.0	10.0	10.0
2058-2059		10.0	10.0	10.0	10.0
2059-2060		10.0	10.0	10.0	10.0
2060-2061		10.0	10.0	10.0	10.0
2061-2062		10.0	10.0	10.0	10.0
2062-2063		10.0	10.0	10.0	10.0
2063-2064		10.0	10.0	10.0	10.0
2064-2065		10.0	10.0	10.0	10.0
2065-2066		10.0	10.0	10.0	10.0
2066-2067		10.0	10.0	10.0	10.0
2067-2068		10.0	10.0	10.0	10.0
2068-2069		10.0	10.0	10.0	10.0
2069-2070		10.0	10.0	10.0	10.0
2070-2071		10.0	10.0	10.0	10.0
2071-2072		10.0	10.0	10.0	10.0
2072-2073		10.0	10.0	10.0	10.0
2073-2074		10.0	10.0	10.0	10.0
2074-2075		10.0	10.0	10.0	10.0
2075-2076		10.0	10.0	10.0	10.0
2076-2077		10.0	10.0	10.0	10.0
2077-2078		10.0	10.0	10.0	10.0
2078-2079		10.0	10.0	10.0	10.0
2079-2080		10.0	10.0	10.0	10.0
2080-2081		10.0	10.0	10.0	10.0
2081-2082		10.0	10.0	10.0	10.0
2082-2083		10.0	10.0	10.0	10.0
2083-2084		10.0	10.0	10.0	10.0
2084-2085		10.0	10.0	10.0	10.0
2085-2086		10.0	10.0	10.0	10.0
2086-2087		10.0	10.0	10.0	10.0
2087-2088		10.0	10.0	10.0	10.0
2088-2089		10.0	10.0	10.0	10.0
2089-2090		10.0	10.0	10.0	10.0
2090-2091		10.0	10.0	10.0	10.0
2091-2092		10.0	10.0	10.0	10.0
2092-2093		10.0	10.0	10.0	10.0
2093-2094		10.0	10.0	10.0	10.0
2094-2095		10.0	10.0	10.0	10.0
2095-2096		10.0	10.0	10.0	10.0
2096-2097		10.0	10.0	10.0	10.0
2097-2098		10.0	10.0	10.0	10.0
2098-2099		10.0	10.0	10.0	10.0
2099-2100		10.0	10.0	10.0	10.0

APPENDIX I.

Supporting Data for Main Text

Appendix Table 1-1. Income of the Farming Sector, Growth Rates, 1968-1981, and Deviation from Trend, 1981

	Annual rate of growth	1981 Actual	1981 Trend value	1981 Deviation from trend	R ²
	Percent	Million dollars			
<u>Sector Aggregate</u>					
Cash Receipts	9.6	139,934	143,320	-3,386	.953
Plus: non-cash receipts:	14.4	12,579	11,736	843	.957
Equals: gross farm income	9.9	152,513	155,140	-2,627	.962
Less: production expenses	10.8	130,656	127,380	3,276	.988
Equals: net farm income: before inventory adjustment	6.3	21,857	27,168	-5,311	.549
<u>Per Farm Average</u>					
Cash Receipts	11.9	57,634	59,500	-1,866	.972
Plus: non-cash receipts:	16.8	5,180	4,872	308	.962
Equals: gross farm income	12.2	62,814	64,406	-1,592	.977
Less: production expenses	13.2	53,812	52,882	930	.991
Equals: net farm income: before inventory adjustment	8.6	9,002	11,279	-2,277	.702

Source: Calculated from Economic Indicators of the Farm Sector, ERS. Stat. Bul. 674.

Table 1--Cash receipts (including farm households), by value of sales class, 1960-2017

Year	Farms with sales of--									
	\$200,000	\$100,000	\$100,000	\$40,000	\$20,000	\$10,000	\$5,000	\$2,500	Less	All
	and over	to \$199,999	and over ^{2/}	to \$99,999	to \$39,999	to \$19,999	to \$9,999	to \$4,999	than \$2,500	farms
Million dollars										
1960	NA	NA	6,101	5,457	6,518	7,438	5,160	2,478	2,042	35,104
1961	NA	NA	7,014	5,968	6,971	7,533	5,006	2,377	2,031	36,900
1962	NA	NA	7,967	6,550	7,450	7,608	4,740	2,207	1,050	38,472
1963	NA	NA	8,660	6,995	7,842	7,607	4,469	2,036	1,849	39,458
1964	NA	NA	9,014	7,108	7,954	7,604	4,359	1,966	1,838	39,843
1965	NA	NA	10,372	7,892	8,462	7,481	4,217	1,960	1,831	42,215
1966	NA	NA	13,006	9,381	9,532	7,393	4,024	1,971	1,821	47,128
1967	NA	NA	13,036	9,282	9,355	7,143	3,893	1,907	1,764	46,380
1968	NA	NA	13,994	9,900	9,778	7,037	3,802	1,900	1,760	48,166
1969	11,008	5,256	(16,264)	11,506	10,770	6,917	3,647	1,893	1,535	52,532
1970	12,401	5,889	(18,290)	12,136	10,697	6,763	3,550	1,847	1,507	54,700
1971	13,730	6,484	(20,214)	12,728	10,511	6,541	3,424	1,781	1,446	56,645
1972	18,476	8,433	(26,909)	15,140	10,740	6,452	3,365	1,740	1,450	65,814
1973	30,902	14,295	(45,197)	22,465	11,190	5,892	2,968	1,496	1,280	90,488
1974	33,092	15,541	(48,633)	23,631	10,912	5,534	2,751	1,368	1,140	93,960
1975	31,010	14,675	(45,685)	22,737	10,909	5,579	2,801	1,405	1,133	90,240
1976	35,028	16,086	(51,114)	24,338	10,883	5,418	2,695	1,339	1,084	96,871
1977	36,857	16,979	(53,836)	24,093	10,937	5,515	2,815	1,418	1,055	99,660
1978	50,592	21,324	(71,916)	25,474	10,018	5,060	2,791	1,507	888	117,663
1979	66,012	25,838	(91,850)	26,130	8,412	4,313	2,592	1,494	629	135,420
1980	69,685	26,955	(96,640)	26,379	8,091	4,160	2,562	1,504	598	130,924
Percentage distribution										
1960	NA	NA	17.3	15.5	18.5	21.1	14.7	7.1	5.9	100.0
1961	NA	NA	19.0	16.2	18.9	20.4	13.6	6.4	5.5	100.0
1962	NA	NA	20.7	17.0	19.4	19.8	12.3	5.7	5.1	100.0
1963	NA	NA	21.9	17.7	19.9	19.3	11.3	5.2	4.7	100.0
1964	NA	NA	22.6	17.9	20.0	19.1	10.9	4.9	4.6	100.0
1965	NA	NA	24.6	18.7	20.1	17.7	10.0	4.6	4.3	100.0
1966	NA	NA	27.6	19.9	20.2	15.7	8.5	4.2	3.9	100.0
1967	NA	NA	28.1	20.0	20.2	15.4	8.4	4.1	3.8	100.0
1968	NA	NA	29.0	20.6	20.3	14.6	7.9	3.9	3.7	100.0
1969	21.0	10.0	(31.0)	21.9	20.5	13.2	6.9	3.6	2.9	100.0
1970	22.6	10.8	(33.4)	22.1	19.5	12.3	6.5	3.4	2.8	100.0
1971	24.2	11.4	(35.6)	22.5	18.6	11.6	6.0	3.1	2.6	100.0
1972	28.1	12.8	(40.9)	23.0	16.3	9.8	5.1	2.7	2.2	100.0
1973	34.1	15.8	(49.9)	24.8	12.4	6.5	3.3	1.7	1.4	100.0
1974	35.2	16.5	(51.7)	25.2	11.6	5.9	2.9	1.5	1.2	100.0
1975	34.3	16.3	(50.6)	25.2	12.1	6.2	3.1	1.6	1.2	100.0
1976	36.2	16.6	(52.8)	25.1	11.2	5.6	2.8	1.4	1.1	100.0
1977	37.0	17.0	(54.0)	24.2	11.0	5.5	2.8	1.4	1.1	100.0
1978	43.0	18.1	(61.1)	21.6	8.5	4.3	2.4	1.3	.8	100.0
1979	48.7	19.1	(67.8)	19.3	6.2	3.2	1.9	1.1	.5	100.0
1980	49.8	19.3	(69.1)	18.8	5.8	3.0	1.8	1.1	.4	100.0

NA=not available. ^{1/} Including net Commodity Credit Corporation loans, Government payments, and other farm income. ^{2/} The numbers in parentheses represent the subtotals of the first two columns.

Table 72--Gross farm income (including farm households) before inventory adjustment,
by value of sales class, 1960-80 ^{1/}

Year	Farms with sales of--									
	\$200,000 and over	\$100,000 to \$199,999	\$100,000 and over ^{2/}	\$40,000 to \$99,999	\$20,000 to \$39,999	\$10,000 to \$19,999	\$5,000 to \$9,999	\$2,500 to \$9,999	Less than \$2,500	All farms
	:	:	:	:	:	:	:	:	:	:
	Million dollars									
1960	NA	NA	6,152	5,613	6,829	7,941	5,777	2,972	3,213	38,497
1961	NA	NA	7,073	6,142	7,309	8,045	5,604	2,852	3,186	40,211
1962	NA	NA	8,033	6,743	7,814	8,122	5,305	2,647	3,059	41,723
1963	NA	NA	8,735	7,209	8,238	8,132	5,018	2,457	2,950	42,739
1964	NA	NA	9,094	7,332	8,363	8,133	4,898	2,376	2,925	43,121
1965	NA	NA	10,464	8,143	8,899	7,999	4,740	2,370	2,892	45,507
1966	NA	NA	13,121	9,683	10,029	7,914	4,539	2,397	2,868	50,551
1967	NA	NA	13,158	9,599	9,869	7,669	4,408	2,339	2,821	49,863
1968	NA	NA	14,127	10,247	10,325	7,557	4,314	2,342	2,811	51,723
1969	11,072	5,354	(16,426)	11,926	11,398	7,454	4,157	2,361	2,587	56,309
1970	12,465	5,989	(18,454)	12,528	11,263	7,277	4,059	2,322	2,666	58,569
1971	13,801	6,593	(20,394)	13,130	11,064	7,062	3,937	2,284	2,732	60,603
1972	18,575	8,579	(27,154)	15,614	11,307	6,990	3,900	2,275	2,879	70,119
1973	31,084	14,558	(45,642)	23,202	11,825	6,453	3,514	2,028	2,841	85,505
1974	33,320	15,877	(49,197)	24,534	11,645	6,182	3,382	1,987	3,024	99,951
1975	31,255	15,027	(46,282)	23,682	11,707	6,306	3,517	2,121	3,323	96,938
1976	35,319	16,508	(51,827)	25,445	11,755	6,191	3,448	2,088	3,424	104,178
1977	37,259	17,535	(54,794)	25,374	11,928	6,405	3,714	2,332	3,166	107,713
1978	51,212	22,114	(73,326)	27,042	11,116	6,059	3,848	2,598	2,984	126,973
1979	66,939	26,938	(93,877)	28,133	9,662	5,448	3,889	2,850	2,710	146,569
1980	70,794	28,294	(99,088)	28,649	9,479	5,423	4,018	3,039	2,817	152,513
	Percentage distribution									
1960	NA	NA	16.0	14.6	17.7	20.6	15.0	7.7	8.4	100.0
1961	NA	NA	17.6	15.3	18.2	20.0	13.9	7.1	7.9	100.0
1962	NA	NA	19.3	16.2	18.7	19.5	12.7	6.3	7.3	100.0
1963	NA	NA	20.4	16.9	19.3	19.0	11.7	5.8	6.9	100.0
1964	NA	NA	21.1	17.0	19.4	18.9	11.3	5.5	6.8	100.0
1965	NA	NA	23.0	17.9	19.5	17.6	10.4	5.2	6.4	100.0
1966	NA	NA	26.0	19.1	19.8	15.7	9.0	4.7	5.7	100.0
1967	NA	NA	26.4	19.2	19.8	15.4	8.8	4.7	5.7	100.0
1968	NA	NA	27.3	19.8	20.0	14.6	8.4	4.5	5.4	100.0
1969	19.7	9.5	(29.2)	21.2	20.2	13.2	7.4	4.2	4.6	100.0
1970	21.3	10.2	(31.5)	21.4	19.2	12.4	6.9	4.0	4.6	100.0
1971	22.8	10.9	(33.7)	21.7	18.2	11.6	6.5	3.8	4.5	100.0
1972	26.5	12.2	(38.7)	22.3	16.1	10.0	5.6	3.2	4.1	100.0
1973	32.5	15.2	(47.7)	24.3	12.4	6.8	3.7	2.1	3.0	100.0
1974	33.3	15.9	(49.2)	24.5	11.7	6.2	3.4	2.0	3.0	100.0
1975	32.2	15.5	(47.7)	24.5	12.1	6.5	3.6	2.2	3.4	100.0
1976	33.9	15.9	(49.8)	24.4	11.3	5.9	3.3	2.0	3.3	100.0
1977	34.6	16.3	(50.9)	23.6	11.1	5.9	3.4	2.2	2.9	100.0
1978	40.3	17.4	(57.7)	21.3	8.8	4.8	3.0	2.0	2.4	100.0
1979	45.7	18.4	(64.1)	19.2	6.6	3.7	2.7	1.9	1.8	100.0
1980	46.4	18.6	(65.0)	18.8	6.2	3.6	2.6	2.0	1.8	100.0

NA=not available. ^{1/} Includes Government payments and net Commodity Credit Corporation loans. Also, see estimation note following table 79. ^{2/} The numbers in parentheses represent the subtotals of the first two columns.

Table 73--Farm production expenses (including farm households), by value of sales class, 1960-80

Year	Farms with sales of--									
	\$200,000	\$100,000	\$100,000	\$40,000	\$20,000	\$10,000	\$5,000	\$2,500	Less	All
	and over	to \$199,999	and over 2/	to \$99,999	to \$39,999	to \$19,999	to \$9,999	to \$4,999	than \$2,500	farms
Million dollars										
1960	NA	NA	5,443	4,370	4,995	5,409	3,657	1,780	1,722	27,376
1961	NA	NA	6,248	4,727	5,294	5,424	3,517	1,702	1,678	28,590
1962	NA	NA	7,155	5,225	5,714	5,530	3,396	1,625	1,634	30,279
1963	NA	NA	7,820	5,625	6,090	5,609	3,286	1,558	1,610	31,598
1964	NA	NA	8,083	5,900	6,102	5,510	3,163	1,491	1,563	31,812
1965	NA	NA	9,273	6,251	6,497	5,435	3,109	1,526	1,559	33,650
1966	NA	NA	11,204	7,091	6,948	5,224	2,940	1,531	1,570	36,508
1967	NA	NA	11,864	7,448	7,231	5,372	3,025	1,592	1,649	38,181
1968	NA	NA	12,679	7,904	7,463	5,261	2,950	1,601	1,667	39,525
1969	9,848	4,429	(14,277)	8,933	7,895	5,060	2,789	1,610	1,551	42,115
1970	11,170	4,973	(16,143)	9,445	7,871	4,993	2,759	1,605	1,608	44,424
1971	12,603	5,573	(18,176)	10,131	7,950	5,005	2,773	1,637	1,695	47,367
1972	16,125	6,764	(22,889)	11,314	7,658	4,669	2,602	1,541	1,642	52,315
1973	24,273	9,887	(34,160)	15,001	7,359	4,036	2,239	1,315	1,452	65,567
1974	27,103	11,177	(38,280)	16,651	7,713	4,164	2,335	1,403	1,664	72,210
1975	27,698	11,499	(39,197)	17,431	8,389	4,607	2,633	1,628	1,978	75,863
1976	31,809	12,825	(44,634)	19,012	8,554	4,603	2,628	1,634	2,065	83,130
1977	35,356	14,269	(49,625)	19,753	8,993	4,949	2,936	1,891	2,146	90,293
1978	45,824	16,873	(62,697)	19,622	7,750	4,345	2,821	1,958	1,894	101,087
1979	59,902	20,746	(80,648)	20,779	6,918	3,994	2,927	2,209	1,742	119,217
1980	66,595	22,913	(89,508)	22,263	7,144	4,185	3,184	2,482	1,890	130,656
Percentage distribution										
1960	NA	NA	19.9	16.0	18.2	19.7	13.4	6.5	6.3	100.0
1961	NA	NA	21.9	16.5	18.5	19.0	12.3	6.0	5.8	100.0
1962	NA	NA	23.6	17.2	18.9	18.3	11.2	5.4	5.4	100.0
1963	NA	NA	24.7	17.8	19.3	17.8	10.4	4.9	5.1	100.0
1964	NA	NA	25.4	18.6	19.2	17.3	9.9	4.7	4.9	100.0
1965	NA	NA	27.6	18.6	19.3	16.1	9.2	4.5	4.7	100.0
1966	NA	NA	30.7	19.4	19.0	14.3	8.1	4.2	4.3	100.0
1967	NA	NA	31.1	19.5	18.9	14.1	7.9	4.2	4.3	100.0
1968	NA	NA	32.1	20.0	18.9	13.3	7.5	4.0	4.2	100.0
1969	23.4	10.5	(33.9)	21.2	18.8	12.0	6.6	3.8	3.7	100.0
1970	25.1	11.2	(36.3)	21.3	17.7	11.2	6.2	3.6	3.7	100.0
1971	26.6	11.8	(38.4)	21.4	16.8	10.6	5.8	3.4	3.6	100.0
1972	30.8	12.9	(43.7)	21.6	14.7	8.9	5.0	3.0	3.1	100.0
1973	37.0	15.1	(52.1)	22.9	11.2	6.2	3.4	2.0	2.2	100.0
1974	37.5	15.5	(53.0)	23.1	10.7	5.8	3.2	1.9	2.3	100.0
1975	36.5	15.2	(51.7)	23.0	11.0	6.1	3.5	2.1	2.6	100.0
1976	38.3	15.4	(53.7)	22.9	10.3	5.5	3.2	2.0	2.4	100.0
1977	39.1	15.8	(54.9)	21.9	10.0	5.5	3.2	2.1	2.4	100.0
1978	45.3	16.7	(62.0)	19.4	7.7	4.3	2.8	1.9	1.9	100.0
1979	50.2	17.4	(67.6)	17.4	5.8	3.3	2.5	1.9	1.5	100.0
1980	51.0	17.5	(68.5)	17.0	5.5	3.2	2.4	1.9	1.5	100.0

NA=not available. 1/ See estimation note following table 79. 2/ The numbers in parentheses represent the subtotals of the first two columns.

Table 74--Net farm income (including farm households) before inventory adjustment, by value of sales class, 1960-80 ¹

Year	Farms with sales of--									
	\$200,000 and over	\$100,000 to \$199,999	\$100,000 and over ²	\$40,000 to \$99,999	\$20,000 to \$39,999	\$10,000 to \$19,999	\$5,000 to \$9,999	\$2,500 to \$4,999	Less than \$2,500	All farms
Million dollars										
1960	NA	NA	709	1,243	1,834	2,532	2,120	1,192	1,491	11,121
1961	NA	NA	825	1,415	2,015	2,621	2,087	1,150	1,508	11,621
1962	NA	NA	878	1,518	2,100	2,597	1,909	1,022	1,425	11,444
1963	NA	NA	915	1,584	2,148	2,523	1,732	899	1,340	11,141
1964	NA	NA	1,011	1,432	2,261	2,623	1,735	885	1,367	11,309
1965	NA	NA	1,191	1,892	2,402	2,564	1,631	844	1,333	11,857
1966	NA	NA	1,917	2,592	3,081	2,690	1,599	866	1,298	14,043
1967	NA	NA	1,294	2,151	2,638	2,297	1,383	747	1,172	11,687
1968	NA	NA	1,448	2,343	2,862	2,296	1,364	741	1,144	12,198
1969	1,224	925	(2,149)	2,993	3,503	2,394	1,368	751	1,036	14,194
1970	1,295	1,016	(2,311)	3,083	3,392	2,284	1,300	717	1,058	14,145
1971	1,198	1,020	(2,218)	2,999	3,114	2,057	1,164	647	1,037	13,236
1972	2,450	1,815	(4,265)	4,300	3,649	2,321	1,298	734	1,237	17,804
1973	6,811	4,671	(11,482)	8,201	4,466	2,417	1,275	713	1,389	29,943
1974	6,217	4,700	(10,917)	7,883	3,932	2,018	1,047	584	1,360	27,741
1975	3,557	3,528	(7,085)	6,251	3,318	1,699	884	493	1,345	21,973
1976	3,510	3,683	(7,193)	6,433	3,201	1,588	820	454	1,359	21,048
1977	1,903	3,266	(5,169)	5,621	2,935	1,456	778	441	1,020	17,420
1978	5,388	5,241	(10,629)	7,420	3,366	1,714	1,027	640	1,090	25,886
1979	7,037	6,192	(13,229)	7,354	2,744	1,454	962	641	968	27,359
1980	4,199	5,381	(9,580)	6,386	2,335	1,238	834	557	927	21,857
Percentage distribution										
1960	NA	NA	6.4	11.2	16.5	22.8	19.0	10.7	13.4	100.0
1961	NA	NA	7.1	12.2	17.3	22.6	18.0	9.9	12.9	100.0
1962	NA	NA	7.7	13.3	18.4	22.6	16.7	8.9	12.4	100.0
1963	NA	NA	8.2	14.2	19.3	22.7	15.5	8.1	12.0	100.0
1964	NA	NA	8.9	12.7	20.0	23.2	15.3	7.8	12.1	100.0
1965	NA	NA	10.0	16.0	20.3	21.6	13.8	7.1	11.2	100.0
1966	NA	NA	13.6	18.5	21.9	19.2	11.4	6.2	9.2	100.0
1967	NA	NA	11.1	18.4	22.6	19.7	11.8	6.4	10.0	100.0
1968	NA	NA	11.9	19.2	23.5	18.8	11.2	6.1	9.3	100.0
1969	8.6	6.5	(15.1)	21.1	24.7	16.9	9.6	5.3	7.3	100.0
1970	9.1	7.2	(16.3)	21.8	24.0	16.1	9.2	5.1	7.5	100.0
1971	9.1	7.7	(16.8)	22.7	23.5	15.5	8.8	4.9	7.8	100.0
1972	13.8	10.2	(24.0)	24.2	20.5	13.0	7.3	4.1	6.9	100.0
1973	22.7	15.6	(38.3)	27.4	14.9	8.1	4.3	2.4	4.6	100.0
1974	22.4	16.9	(39.3)	28.4	14.2	7.3	3.8	2.1	4.9	100.0
1975	16.8	16.8	(33.6)	29.7	15.7	8.1	4.2	2.3	6.4	100.0
1976	16.7	17.5	(34.2)	30.6	15.2	7.5	3.9	2.1	6.5	100.0
1977	10.9	18.7	(29.6)	32.3	16.8	8.4	4.5	2.5	5.9	100.0
1978	20.8	20.2	(41.0)	28.7	13.0	6.6	4.0	2.5	4.2	100.0
1979	25.7	22.6	(48.3)	26.9	10.0	5.3	3.5	2.4	3.6	100.0
1980	19.2	24.6	(43.8)	29.2	10.7	5.7	3.8	2.6	4.2	100.0

NA=not available. ¹ Includes Government payments and net Commodity Credit Corporation loans. Also, see estimation note following table 79. ² The numbers in parentheses represent the subtotals of the first two columns.

Table 73--Per farm cash receipts and gross income from farming (including farm households before inventory adjustment, by value of sales class, 1960-80 ¹

Year	Farms with sales of--									
	\$200,000 and over	\$100,000 to \$199,999	\$100,000 and over	\$40,000 to \$99,999	\$20,000 to \$39,999	\$10,000 to \$19,999	\$5,000 to \$9,999	\$2,500 to \$4,999	Less than \$2,500	All farms
	:	:	:	:	:	:	:	:	:	:
	Dollars									
Cash receipts:										
1960	NA	NA	265,261	60,634	28,714	14,966	7,818	4,016	1,104	8,882
1961	NA	NA	269,769	61,526	29,168	15,281	8,009	4,127	1,148	9,646
1962	NA	NA	274,723	61,792	29,331	15,432	8,047	4,141	1,155	10,420
1963	NA	NA	279,355	61,903	29,371	15,494	8,023	4,113	1,142	11,046
1964	NA	NA	281,688	62,351	29,678	15,777	8,163	4,191	1,180	11,526
1965	NA	NA	288,111	63,136	30,221	16,123	8,302	4,251	1,235	12,579
1966	NA	NA	302,464	65,602	31,355	16,613	8,455	4,312	1,312	14,470
1967	NA	NA	303,163	65,366	31,288	16,572	8,463	4,285	1,314	14,670
1968	NA	NA	310,978	66,444	31,954	16,944	8,660	4,347	1,375	15,685
1969	688,000	150,171	318,902	67,682	32,636	17,294	8,831	4,343	1,279	17,511
1970	688,945	150,999	320,877	68,179	32,813	17,341	8,854	4,367	1,285	18,582
1971	686,500	150,791	320,857	68,064	32,643	17,168	8,756	4,323	1,262	19,520
1972	684,296	153,329	328,158	69,769	33,459	17,581	8,997	4,484	1,315	23,012
1973	671,782	157,087	329,904	72,234	34,011	17,432	8,887	4,386	1,239	32,056
1974	661,840	155,410	324,220	71,393	33,269	16,820	8,543	4,184	1,132	33,621
1975	646,041	156,118	321,725	71,952	33,666	17,007	8,672	4,271	1,128	32,616
1976	673,615	156,174	329,768	72,007	33,693	16,984	8,665	4,265	1,109	35,380
1977 ^{2/}	635,465	152,964	318,556	74,132	36,096	18,082	9,140	4,487	1,445	40,582
1978	648,615	154,522	332,945	73,202	34,075	17,067	8,805	4,567	1,401	48,302
1979	666,788	152,888	342,724	69,310	29,620	14,924	7,855	4,293	1,178	55,729
1980	663,667	152,288	342,695	68,875	28,691	14,445	7,717	4,272	1,175	57,634
Gross farm income:										
1960	NA	NA	267,478	62,368	30,084	15,978	8,753	4,816	1,737	9,715
1961	NA	NA	272,038	63,320	30,582	16,319	8,966	4,952	1,801	10,511
1962	NA	NA	276,999	63,613	30,764	16,475	9,006	4,967	1,812	11,300
1963	NA	NA	281,774	63,797	30,854	16,563	9,008	4,963	1,822	11,964
1964	NA	NA	284,188	64,316	31,204	16,875	9,173	5,065	1,878	12,475
1965	NA	NA	290,667	65,144	31,782	17,240	9,331	5,140	1,951	13,559
1966	NA	NA	305,139	67,714	32,989	17,784	9,537	5,245	2,066	15,521
1967	NA	NA	306,001	67,598	33,007	17,792	9,582	5,256	2,101	15,771
1968	NA	NA	313,934	68,773	33,742	18,209	9,826	5,359	2,196	16,843
1969	692,000	152,971	322,078	70,153	34,539	18,636	10,066	5,417	2,156	18,770
1970	692,500	153,563	323,754	70,381	34,549	18,659	10,098	5,490	2,273	19,861
1971	690,050	153,326	323,714	70,213	34,361	18,535	10,068	5,544	2,384	20,883
1972	687,962	155,984	331,145	71,954	35,226	19,047	10,427	5,833	2,596	24,517
1973	675,739	159,977	333,152	74,603	35,941	19,091	10,522	5,946	2,750	33,831
1974	666,400	158,770	327,980	74,121	35,504	18,790	10,503	6,077	3,001	35,761
1975	651,146	159,863	325,929	74,943	36,129	19,223	10,889	6,447	3,307	35,034
1976	679,212	160,271	334,368	75,282	36,392	19,408	11,086	6,650	3,501	38,049
1977 ^{2/}	642,396	157,973	324,225	78,074	39,366	21,000	12,058	7,380	4,337	43,857
1978	656,564	160,246	339,468	77,707	37,809	20,401	12,139	7,873	4,706	52,124
1979	676,152	159,396	350,287	74,623	34,021	18,851	11,785	8,190	5,075	60,317
1980	674,229	159,853	351,376	74,802	33,613	18,830	12,102	8,633	5,534	62,814

NA=not available. ^{1/} Includes Government payments, net Commodity Credit Corporation loans, and other farm income. Also, see estimation note following table 79. ^{2/} Based on the 1974 Census of Agriculture definition of a farm, and applies to 1977 and all following years.

Table 76--Per farm production expenses and net farm income (including farm households) before inventory adjustment, by value of sales class, 1960-80 ^{1/}

Year	Farms with sales of--									All farms
	\$200,000 and over	\$100,000 to \$199,999	\$100,000 and over	\$40,000 to \$99,999	\$20,000 to \$39,999	\$10,000 to \$19,999	\$5,000 to \$9,999	\$2,500 to \$4,999	Less than \$2,500	
	<u>Dollars</u>									
Production expenses:										
1960	NA	NA	236,652	48,556	22,004	10,883	5,541	2,885	931	6,909
1961	NA	NA	240,308	48,732	22,151	11,002	5,627	2,995	949	7,473
1962	NA	NA	246,724	49,292	22,496	11,217	5,766	3,049	968	8,201
1963	NA	NA	252,258	49,779	22,809	11,424	5,899	3,147	995	8,845
1964	NA	NA	252,594	51,754	22,769	11,432	5,923	3,179	1,003	9,203
1965	NA	NA	257,583	50,008	23,204	11,713	6,120	3,310	1,052	10,026
1966	NA	NA	260,558	49,587	22,855	11,739	6,176	3,350	1,130	11,209
1967	NA	NA	275,907	52,451	24,184	12,464	6,576	3,578	1,229	12,076
1968	NA	NA	281,756	53,047	24,389	12,667	6,720	3,664	1,302	12,871
1969	615,500	126,543	279,941	52,547	23,924	12,650	6,753	3,693	1,292	14,038
1970	620,556	127,513	283,211	53,062	24,144	12,803	6,863	3,794	1,371	15,064
1971	630,150	129,605	288,508	54,176	24,689	13,136	7,092	3,973	1,479	16,322
1972	597,222	122,982	279,134	52,138	23,857	12,722	6,957	3,951	1,481	18,292
1973	527,674	108,648	249,343	48,235	22,368	11,941	6,704	3,846	1,406	23,224
1974	542,060	111,770	255,200	50,305	23,515	12,657	7,252	4,291	1,651	25,835
1975	577,042	122,330	276,035	55,161	25,892	14,046	8,152	4,948	1,968	27,417
1976	611,712	124,515	287,961	56,249	26,483	14,429	8,450	5,204	2,111	30,362
1977 ^{2/}	609,586	128,350	293,639	60,779	29,680	16,216	9,532	5,984	2,940	36,764
1978	587,487	122,268	290,264	56,385	26,361	14,630	8,899	5,933	2,987	41,497
1979	605,071	122,757	300,287	55,117	24,359	13,820	8,870	6,348	3,262	49,061
1980	634,238	129,452	317,404	58,128	25,333	14,531	9,590	7,051	3,713	53,812
Net farm income ^{3/} :										
1960	NA	NA	30,826	13,812	8,080	5,095	3,212	1,931	806	2,806
1961	NA	NA	31,730	14,588	8,431	5,317	3,339	1,997	852	3,038
1962	NA	NA	30,275	14,321	8,268	5,258	3,240	1,918	844	3,099
1963	NA	NA	29,516	14,018	8,045	5,139	3,109	1,816	827	3,119
1964	NA	NA	31,594	12,562	8,435	5,443	3,250	1,886	875	3,272
1965	NA	NA	33,084	15,136	8,578	5,527	3,211	1,830	899	3,533
1966	NA	NA	44,581	18,127	10,134	6,045	3,361	1,895	936	4,312
1967	NA	NA	30,094	15,147	8,823	5,328	3,006	1,678	872	3,695
1968	NA	NA	32,178	15,726	9,352	5,532	3,106	1,695	894	3,972
1969	76,500	26,428	42,137	17,606	10,615	5,986	3,313	1,724	864	4,731
1970	71,944	26,050	40,543	17,319	10,405	5,856	3,235	1,696	902	4,797
1971	59,900	23,721	35,206	16,037	9,672	5,399	2,976	1,571	905	4,561
1972	90,740	33,002	52,011	19,816	11,369	6,352	3,470	1,882	1,115	6,226
1973	148,065	51,329	83,809	26,368	13,573	7,150	3,818	2,090	1,344	10,607
1974	124,340	47,000	72,780	23,816	11,989	6,133	3,251	1,786	1,350	9,925
1975	74,104	37,533	49,894	19,782	10,237	5,177	2,737	1,499	1,339	7,617
1976	67,500	35,756	46,407	19,033	9,909	4,979	2,636	1,446	1,390	7,687
1977 ^{2/}	32,810	29,423	30,586	17,295	9,686	4,774	2,526	1,396	1,397	7,093
1978	69,077	37,978	49,204	21,322	11,449	5,771	3,240	1,940	1,719	10,627
1979	71,081	36,639	49,362	19,506	9,662	5,031	2,915	1,842	1,813	11,256
1980	39,991	30,401	33,972	16,674	8,280	4,299	2,512	1,582	1,821	9,002

NA=not available. ^{1/} See estimation note following table 79. Based on the 1974 Census of Agriculture definition of a farm, which is sales of \$1,000 or more, and applies to 1977 and all following years.

^{3/} Includes Government payments.

Table 1--Income per farm operator family (including farm households), by major sources, by value of sales class, 1960-87 ^{1/}

Farms with sales of--										
Year	\$100,000 and over	\$40,000 to \$99,999	\$40,000 and over ^{2/}	\$20,000 to \$39,999	\$10,000 to \$19,999	\$5,000 to 9,999	\$2,500 to \$4,999	Less than \$2,500	All farms	
Dollars										
Net farm income before inventory adjustment: ^{3/}										
1960	30,826	13,812	(17,274)	8,080	5,095	3,212	1,971	806	2,806	
1961	31,730	14,588	(18,211)	8,431	5,317	3,339	1,997	852	3,078	
1962	30,275	14,321	(17,747)	8,268	5,258	3,240	1,978	846	3,080	
1963	29,516	14,018	(17,355)	8,045	5,139	3,109	1,816	827	3,110	
1964	31,594	12,562	(16,733)	8,435	5,443	3,250	1,886	875	3,277	
1965	33,084	15,136	(19,150)	8,578	5,527	3,211	1,830	899	3,533	
1966	44,581	18,127	(24,247)	10,134	6,045	3,361	1,805	974	4,117	
1967	30,094	15,147	(18,622)	8,823	5,328	3,006	1,678	872	3,605	
1968	32,175	15,726	(19,543)	9,353	5,532	3,106	1,605	896	3,977	
1969	42,137	17,606	(23,267)	10,615	5,986	3,313	1,724	866	4,771	
1970	40,543	17,319	(22,953)	10,405	5,856	3,235	1,686	807	4,707	
1971	35,206	16,037	(20,868)	9,672	5,399	2,976	1,571	905	4,561	
1972	52,011	19,816	(28,645)	11,340	6,325	3,670	1,887	1,115	6,276	
1973	83,809	26,368	(43,935)	13,573	7,150	3,818	2,000	1,344	10,607	
1974	72,780	23,816	(39,085)	11,980	6,133	3,251	1,786	1,150	9,075	
1975	49,894	19,782	(29,118)	10,237	5,177	2,737	1,699	1,339	7,617	
1976	46,407	19,033	(27,639)	9,909	4,979	2,636	1,666	1,100	7,687	
1977 ^{4/}	30,586	17,295	(27,386)	9,686	4,774	2,526	1,396	1,307	7,083	
1978	49,204	21,322	(32,002)	11,440	5,771	3,240	1,960	1,710	10,677	
1979	49,362	19,506	(32,330)	9,662	5,031	2,915	1,842	1,813	11,254	
1980	33,972	16,674	(24,009)	8,280	4,290	2,512	1,587	1,871	9,007	
Off-farm income:										
1960	NA	NA	2,177	1,678	1,258	1,574	1,848	2,777	2,140	
1961	NA	NA	2,472	1,757	1,414	1,838	2,113	3,039	2,304	
1962	NA	NA	2,880	1,896	1,604	2,141	2,402	3,977	2,683	
1963	NA	NA	3,528	2,169	1,870	2,542	2,786	3,845	3,085	
1964	NA	NA	3,890	2,287	2,058	2,831	3,068	4,180	3,366	
1965	7,278	3,680	(4,484)	2,507	2,319	3,232	3,471	4,713	3,707	
1966	7,209	3,699	(4,511)	2,694	2,717	3,723	4,079	5,312	4,767	
1967	7,140	3,662	(4,470)	2,809	3,044	4,109	4,560	5,661	4,584	
1968	7,400	3,799	(4,634)	3,023	3,444	4,592	5,117	6,212	5,076	
1969	7,471	3,865	(4,697)	3,212	3,858	5,094	5,757	6,964	5,537	
1970	7,614	3,949	(4,838)	3,359	4,190	5,450	6,184	7,437	5,000	
1971	7,603	4,102	(4,984)	3,689	4,677	6,066	6,947	8,190	6,488	
1972	7,573	4,253	(5,164)	4,093	5,297	6,829	7,940	9,154	7,208	
1973	7,715	4,601	(5,554)	4,824	6,467	8,347	9,953	10,961	8,416	
1974	8,060	4,997	(5,952)	5,512	7,444	9,660	11,566	12,411	9,487	
1975	8,042	5,066	(5,989)	5,833	7,902	10,207	12,207	12,851	9,922	
1976	9,006	5,618	(6,684)	6,526	8,848	11,473	13,774	14,684	11,089	
1977 ^{4/}	9,095	5,702	(6,862)	6,465	8,685	11,169	13,250	13,289	10,313	
1978	9,981	6,233	(7,668)	7,224	9,835	12,703	15,209	15,267	11,573	
1979	11,675	7,292	(9,113)	8,623	11,844	15,361	18,534	18,618	13,667	
1980	12,922	7,922	(10,042)	9,358	12,847	16,768	20,156	20,742	16,820	
Total income from farm and off-farm source: ^{3/}										
1960	NA	NA	19,451	9,758	6,353	4,786	3,770	3,538	4,946	
1961	NA	NA	20,683	10,188	6,371	5,177	4,110	3,891	5,434	
1962	NA	NA	20,636	10,162	6,867	5,381	4,370	4,271	5,787	
1963	NA	NA	20,883	10,214	7,009	5,651	4,600	4,672	6,204	
1964	NA	NA	20,623	10,722	7,501	6,081	4,944	5,055	6,438	
1965	40,362	18,816	(23,634)	11,085	7,846	6,443	5,301	5,612	7,325	
1966	51,790	21,826	(28,754)	12,828	8,762	7,084	5,974	6,768	8,576	
1967	37,234	18,809	(23,092)	11,632	8,372	7,115	6,238	6,533	8,270	
1968	39,578	19,525	(24,177)	12,376	8,978	7,698	6,872	7,104	9,008	
1969	49,608	21,471	(27,964)	13,827	9,846	8,407	7,481	7,828	10,268	
1970	48,157	21,268	(27,791)	13,764	10,046	8,685	7,880	8,339	10,604	
1971	42,809	20,139	(25,852)	13,361	10,076	9,022	8,518	9,085	11,060	
1972	59,584	24,069	(33,809)	15,462	11,622	10,200	9,851	10,260	13,434	
1973	91,524	30,969	(49,489)	18,397	13,597	12,165	12,043	12,305	19,023	
1974	80,840	28,813	(45,037)	17,501	13,577	12,891	13,357	13,761	19,612	
1975	57,936	24,848	(35,107)	16,070	13,079	12,944	13,706	14,190	17,530	
1976	55,413	24,651	(34,323)	16,435	13,847	14,109	15,187	15,874	18,745	
1977 ^{4/}	39,681	22,997	(34,248)	16,151	13,459	13,695	14,655	16,686	17,406	
1978	59,185	27,555	(39,670)	18,673	15,606	15,943	17,140	16,984	22,160	
1979	61,037	26,798	(41,443)	18,285	16,875	18,276	20,376	20,431	24,923	
1980	46,894	24,596	(34,051)	17,638	17,146	19,280	21,738	22,063	23,870	

NA=not available. ^{1/} See estimation note following table 70. ^{2/} The numbers in parentheses present the weighted average of the first two columns. ^{3/} Includes Government payments, the value of farm products consumed in farm households, and the rental value of farm dwellings. ^{4/} Based on the 1974 Census of Agriculture definition of a farm, which is sales of \$1,000 or more, and applies to 1977 and all following years.

Table 79--Direct Government payments to farmers, by value of sales class, 1960-80 ^{1/}

Farms with sales of--										
Year	\$200,000 and over	\$100,000 to \$199,999	\$100,000 and over ^{2/}	\$40,000 to \$99,999	\$20,000 to \$39,999	\$10,000 to \$19,999	\$5,000 to \$4,999	\$2,500 to \$4,999	Less than \$2,500	All farms
Million dollars										
1960	NA	NA	30	77	111	159	144	81	100	707
1961	NA	NA	72	177	250	337	292	161	204	1,693
1962	NA	NA	90	210	309	417	320	172	229	1,747
1963	NA	NA	90	206	316	424	296	153	211	1,696
1964	NA	NA	118	260	412	563	371	188	260	2,181
1965	NA	NA	147	310	487	627	396	208	288	2,463
1966	NA	NA	336	569	712	709	403	250	298	3,277
1967	NA	NA	330	528	670	657	384	232	278	3,079
1968	NA	NA	399	608	770	710	422	257	296	3,662
1969	237	252	(489)	712	880	723	432	271	287	3,794
1970	259	269	(528)	722	842	684	408	257	276	3,717
1971	241	247	(488)	629	695	558	332	215	228	3,145
1972	385	366	(751)	857	820	639	379	248	267	3,961
1973	360	323	(683)	664	464	325	190	130	150	2,607
1974	78	56	(134)	128	93	65	42	35	34	531
1975	75	89	(164)	233	175	94	60	44	37	807
1976	49	92	(141)	245	168	75	48	32	25	574
1977	139	246	(385)	592	398	182	120	81	61	1,810
1978	290	474	(764)	984	600	276	192	131	92	3,030
1979	155	244	(399)	448	244	113	84	58	29	1,375
1980	151	235	(386)	418	222	103	78	54	25	1,284
Percentage distribution										
1960	NA	NA	4.3	11.0	15.8	22.6	20.5	11.5	14.3	100.0
1961	NA	NA	4.8	11.9	16.7	22.6	19.6	10.9	13.6	100.0
1962	NA	NA	5.2	12.0	17.7	23.9	18.3	9.9	13.1	100.0
1963	NA	NA	5.3	12.2	18.6	25.0	17.5	9.0	12.4	100.0
1964	NA	NA	5.4	11.9	18.9	25.8	17.0	8.6	12.4	100.0
1965	NA	NA	6.0	12.6	19.8	25.4	16.1	8.4	11.7	100.0
1966	NA	NA	10.3	17.4	21.7	21.6	12.3	7.6	9.1	100.0
1967	NA	NA	10.7	17.2	21.8	21.3	12.5	7.5	9.0	100.0
1968	NA	NA	11.5	17.6	22.2	20.5	12.2	7.4	8.6	100.0
1969	6.2	6.6	(12.8)	18.8	23.2	19.1	11.4	7.1	7.6	100.0
1970	7.0	7.2	(14.2)	19.4	22.7	18.4	11.0	6.9	7.4	100.0
1971	7.7	7.8	(15.5)	20.0	22.1	17.7	10.5	6.8	7.4	100.0
1972	9.7	9.3	(19.0)	21.6	20.7	16.1	9.6	6.3	6.7	100.0
1973	13.8	12.4	(26.2)	25.5	17.8	12.5	7.3	5.0	5.7	100.0
1974	14.7	10.5	(25.2)	24.1	17.5	12.3	7.9	6.6	6.4	100.0
1975	9.3	11.0	(20.3)	28.9	21.7	11.6	7.4	5.5	4.6	100.0
1976	6.7	12.5	(19.2)	33.4	22.9	10.2	6.5	4.4	3.4	100.0
1977	7.6	13.5	(21.1)	32.5	21.9	10.0	6.6	4.5	3.4	100.0
1978	9.6	15.7	(25.3)	32.5	19.8	9.1	6.3	4.3	2.7	100.0
1979	11.3	17.8	(29.1)	32.6	17.7	8.2	6.1	4.2	2.1	100.0
1980	11.7	18.3	(30.0)	32.5	17.3	8.0	6.1	4.2	1.9	100.0

NA=not available. ^{1/} See estimation note following table 79. ^{2/} The numbers in parentheses represent the subtotals of the first two columns.

Table 79--Per farm direct Government payments, by value of sales class, 1960-80

[illegible]

NA=not available. 1/ Based on the 1974 Census of Agriculture definition of a farm, which is sales of \$1,000 or more, and applies to 1977 and all following years.

Data in Tables 66 through 79 are estimated using information from several sources. They include the Census of Agriculture, periodic surveys, special studies and other related information. The published distributions are believed to be reasonable approximations. However, basic information is limited and usually dated. As a result, a number of assumptions and rough approximations of some variables are involved in the estimating process. Also, much of the basic data is available only every five years. This means that the estimates for years subsequent to the latest benchmarks are in effect projections which may be subject to substantial revisions as fresh data become available. Since there is not any available information to prorate net inventory change by sales class, gross receipts in Tables 67 to 70 included net inventory change prorated on the basis of farm marketings.

APPENDIX 2.

Support Data for Farm Balance Sheet Analysis

Appendix Table 2-1. Balance Sheet of the Farming Sector, Growth Rates 1968-81, and Deviation From Trend, 1981

	:	Annual	:	1981	:	1981	:	1981	:		:
	:	rate of	:	Actual	:	Trend	:	Deviation	:		:
	:	growth	:		:	value	:	from trend	:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:
	:		:		:		:		:		:

Source: Calculated from Econ. Indicators of the Farm Sector, ERS Stat. Bull. 674

Table 236—Farm balance sheet (including farm households), by value of sales class,
January 1, 1977

Item	Sales class							All farms
	IA	IB	II	III	IV	V	VI	
	\$100,000 and over	\$40,000 to \$99,999	\$20,000 to \$39,999	\$10,000 to \$19,999	\$5,000 to \$9,999	\$2,500 to \$4,999	Less than \$2,500	

1/ Excluding horses, mules, and commercial broilers. 2/ All crops held on farms including crops under CCC and crops held off farms as security for CCC loans to farmers. 3/ Nonrecourse CCC loans secured by crops owned by farmers. These crops are included as assets in the balance sheet.

Table B37--Farm balance sheet (including farm households), by value of sales class,
January 1, 1978

Item	Sales class							All farms
	IA	IB	II	III	IV	V	VI	
	\$100,000 and over	\$40,000 to \$99,999	\$20,000 to \$39,999	\$10,000 to \$19,999	\$5,000 to \$9,999	\$2,500 to \$4,999	Less than \$2,500	

1/ Excluding horses, mules, and commercial broilers. 2/ All crops held on farms including crops under CCC and crops held off farms as security for CCC loans to farmers. 3/ Nonrecourse CCC loans secured by crops owned by farmers. These crops are included as assets in the balance sheet.

Table B38—Farm balance sheet (including farm households), by value of sales class,
January 1, 1979

Item	Sales class							All farms
	IA	IB	II	III	IV	V	VI	
	\$100,000 and over	\$40,000 to \$99,999	\$20,000 to \$39,999	\$10,000 to \$19,999	\$5,000 to \$9,999	\$2,500 to \$4,999	Less than \$2,500	
Total assets								
Million dollars								
Physical assets:								
Real estate.....	269,355	151,347	67,609	47,248	39,431	16,324	43,795	495,109
Nonreal estate:								
Livestock and poultry 1/.....	22,329	11,089	5,485	3,804	3,212	2,985	2,436	51,340
Machinery and motor vehicles.....	31,387	21,718	10,036	6,778	5,341	4,368	5,450	85,078
Crops stored on and off farms 2/.....	12,164	8,446	3,579	1,892	1,032	514	408	28,036
Household equipment and furnishings..	4,625	3,113	1,836	1,674	1,836	1,926	2,987	17,997
Financial assets:								
Deposits and currency.....	6,732	2,887	1,367	981	923	943	1,655	19,488
U.S. savings bonds.....	1,163	757	413	340	365	406	767	6,211
Investments in cooperatives.....	9,048	3,451	1,408	739	442	274	283	19,445
Total.....	356,803	202,808	91,733	63,456	52,582	47,740	57,781	872,803
Total claims								
Liabilities:								
Real estate debt.....	31,212	22,426	7,087	3,981	2,102	1,751	2,274	70,833
Nonreal estate debt:								
Excluding CCC loans.....	37,213	11,647	4,599	2,579	1,674	1,162	1,124	59,898
CCC loans 3/.....	2,404	1,660	648	302	139	55	34	5,282
Total liabilities.....	70,829	35,733	12,334	6,862	3,915	2,968	3,432	136,073
Proprietors' equity.....	285,974	167,075	79,399	56,594	48,667	44,772	54,349	736,830
Total.....	356,803	202,808	91,733	63,456	52,582	47,740	57,781	872,803
Percent								
Debt-to-asset ratio.....	19.9	17.6	13.4	10.8	7.4	6.2	5.9	15.6
Per farm assets								
Dollars								
Physical assets:								
Real estate.....	1,005,056	401,451	238,060	163,488	119,488	104,379	82,013	269,592
Nonreal estate:								
Livestock and poultry 1/.....	83,317	29,414	19,313	13,163	9,733	8,578	4,562	21,127
Machinery and motor vehicles.....	117,116	57,607	35,338	23,453	16,185	12,552	10,206	35,011
Crops stored on and off farms 2/.....	45,388	22,403	12,602	6,547	3,127	1,477	764	11,537
Household equipment and furnishings..	17,257	8,257	6,465	5,792	5,564	5,534	5,594	7,406
Financial assets:								
Deposits and currency.....	25,119	7,658	4,814	3,395	2,797	2,710	3,099	6,374
U.S. savings bonds.....	4,340	2,008	1,454	1,176	1,106	1,167	1,436	1,733
Investments in cooperatives.....	33,761	9,154	4,958	2,557	1,339	787	530	6,438
Total.....	1,331,354	537,952	323,004	219,571	159,339	137,184	108,204	359,219
Per farm claims								
Liabilities:								
Real estate debt.....	116,463	59,485	24,954	13,775	6,370	5,032	4,258	29,149
Nonreal estate debt:								
Excluding CCC loans.....	138,854	30,894	16,194	8,924	5,073	3,339	2,105	24,691
CCC loans 3/.....	8,970	4,403	2,282	1,045	421	158	64	2,157
Total liabilities.....	264,287	94,782	43,430	23,744	11,864	8,529	6,427	55,997
Proprietors' equity.....	1,067,067	443,170	279,574	195,827	147,475	128,655	101,777	303,222
Total.....	1,331,354	537,952	323,004	219,571	159,339	137,184	108,204	359,219
Percent								
Debt-to-asset ratio.....	19.9	17.6	13.4	10.8	7.4	6.2	5.9	15.6

1/ Excluding horses, mules, and commercial broilers. 2/ All crops held on farms including crops under CCC and crops held off farms as security for CCC loans to farmers. 3/ Nonrecourse CCC loans secured by crops owned by farmers. These crops are included as assets in the balance sheet.

Table 539--Farm balance sheet (including farm households), by value of sales class.
January 1, 1980

Item	Sales class							All farms
	IA	IB	II	III	IV	V	VI	
	\$100,000 and over	\$40,000 to \$99,999	\$20,000 to \$39,999	\$10,000 to \$19,999	\$5,000 to \$9,999	\$2,500 to \$4,999	Less than \$2,500	
Total assets								
Million dollars								
Physical assets:								
Real estate.....	320,547	173,469	75,740	53,121	44,756	41,453	47,085	756,171
Nonreal estate:								
Livestock and poultry <u>1/</u>	27,363	12,938	6,341	4,466	3,849	3,616	2,802	61,373
Machinery and motor vehicles.....	36,850	24,579	11,102	7,525	5,986	4,922	5,786	96,750
Crops stored on and off farms <u>2/</u>	16,062	9,746	3,679	1,954	1,140	581	372	33,534
Household equipment and furnishings..	5,165	3,398	1,941	1,786	1,980	2,097	3,048	19,415
Financial assets:								
Deposits and currency.....	7,806	2,709	1,108	863	927	1,010	1,441	19,864
U.S. savings bonds.....	1,353	678	322	291	352	412	627	4,035
Investments in cooperatives.....	11,045	3,467	1,176	635	423	284	254	17,284
Total.....	426,191	230,984	101,409	70,641	59,413	54,375	61,415	1,004,428
Total claims								
Liabilities:								
Real estate debt.....	42,466	24,709	5,815	3,569	2,081	1,938	2,099	82,677
Nonreal estate debt:								
Excluding CCC loans.....	47,828	12,323	4,102	2,369	1,736	1,310	1,033	70,701
CCC loans <u>3/</u>	2,255	1,369	474	224	111	45	22	4,500
Total liabilities.....	92,549	38,401	10,391	6,162	3,928	3,293	3,154	157,878
Proprietors' equity.....	333,642	192,583	91,018	64,479	55,485	51,082	58,261	846,550
Total.....	426,191	230,984	101,409	70,641	59,413	54,375	61,415	1,004,428
				Percent				
Debt-to-asset ratio.....	21.7	16.6	10.2	8.7	6.6	6.1	5.1	15.7
Per farm assets								
Dollars								
Physical assets:								
Real estate.....	1,136,691	452,922	268,581	184,448	134,808	117,764	92,505	311,438
Nonreal estate:								
Livestock and poultry <u>1/</u>	97,032	33,781	22,486	15,507	11,593	10,273	5,505	29,278
Machinery and motor vehicles.....	130,674	64,175	39,369	26,128	18,030	13,983	11,367	39,847
Crops stored on and off farms <u>2/</u>	56,957	25,446	13,046	6,785	3,434	1,651	731	13,811
Household equipment and furnishings..	18,316	8,872	6,883	6,201	5,964	5,957	5,988	7,996
Financial assets:								
Deposits and currency.....	27,681	7,073	3,929	2,997	2,792	2,869	2,831	6,534
U.S. savings bonds.....	4,798	1,770	1,142	1,010	1,060	1,170	1,232	1,662
Investments in cooperatives.....	39,167	9,052	4,170	2,205	1,274	807	499	7,119
Total.....	1,511,316	603,091	359,606	245,281	178,955	154,474	120,658	413,685
Per farm claims								
Liabilities:								
Real estate debt.....	150,589	64,515	20,621	12,392	6,268	5,506	4,124	34,052
Nonreal estate debt:								
Excluding CCC loans.....	169,603	32,175	14,546	8,226	5,229	3,722	2,029	29,119
CCC loans <u>3/</u>	7,996	3,574	1,681	778	334	127	43	1,853
Total liabilities.....	328,188	100,264	36,848	21,396	11,831	9,355	6,196	65,024
Proprietors' equity.....	1,183,128	502,827	322,758	223,885	167,124	145,119	114,462	348,661
Total.....	1,511,316	603,091	359,606	245,281	178,955	154,474	120,658	413,685
				Percent				
Debt-to-asset ratio.....	21.7	16.6	10.2	8.7	6.6	6.1	5.1	15.7

1/ Excluding horses, mules, and commercial broilers. 2/ All crops held on farms including crops under CCC and crops held off farms as security for CCC loans to farmers. 3/ Nonrecourse CCC loans secured by crops owned by farmers. These crops are included as assets in the balance sheet.

Table B40--Farm balance sheet (including farm households), by value of sales class,
January 1, 1981

Item	Sales class							
	IA	IB	II	III	IV	V	VI	All
	\$100,000 and over	\$40,000 to \$99,999	\$20,000 to \$39,999	\$10,000 to \$19,999	\$5,000 to \$9,999	\$2,500 to \$4,999	Less than \$2,500	Farm
<hr/>								
Total assets	Million dollars							
Physical assets:								
Real estate.....	369,867	189,340	78,143	54,828	47,859	44,653	44,004	828,694
Nonreal estate:								
Livestock and poultry 1/.....	28,515	12,834	5,910	4,141	3,680	3,475	2,326	60,881
Machinery and motor vehicles.....	41,154	25,990	11,096	7,524	6,201	5,136	5,239	102,340
Crops stored on and off farms 2/.....	17,708	10,496	3,881	2,068	1,220	632	385	36,390
Household equipment and furnishings..	6,328	3,946	2,139	1,962	2,249	2,403	3,020	22,067
Financial assets:								
Deposits and currency.....	7,296	2,668	1,124	955	1,114	1,266	1,756	16,179
U.S. savings bonds.....	975	612	312	310	404	486	713	3,812
Investments in cooperatives.....	12,670	4,059	1,336	724	496	340	325	19,950
Total.....	484,513	249,945	103,941	72,512	63,223	58,391	57,768	1,090,293
Total claims								
Liabilities:								
Real estate debt.....	43,476	29,897	7,163	4,341	2,625	1,496	3,020	92,018
Nonreal estate debt:								
Excluding CCC loans.....	53,544	13,318	4,274	2,503	1,905	1,485	1,131	78,160
CCC loans 3/.....	2,232	1,316	442	209	105	43	20	4,367
Total liabilities.....	99,252	44,531	11,879	7,053	4,635	3,024	4,171	174,565
Proprietors' equity.....	385,261	205,414	92,062	65,459	58,588	55,367	53,597	915,748
Total.....	484,513	249,945	103,941	72,512	63,223	58,391	57,768	1,090,293
<hr/>								
	Percent							
Debt-to-asset ratio.....	20.5	17.8	11.4	9.7	7.3	5.2	7.2	16.0
<hr/>								
Per farm assets	Dollars							
Physical assets:								
Real estate.....	1,196,981	475,729	282,104	193,738	141,595	123,692	97,139	342,577
Nonreal estate:								
Livestock and poultry 1/.....	92,282	32,246	21,336	14,633	10,888	9,626	5,135	25,168
Machinery and motor vehicles.....	133,184	65,302	40,058	26,587	18,346	14,227	11,565	42,307
Crops stored on and off farms 2/.....	57,307	26,372	14,011	7,307	3,609	1,751	850	15,044
Household equipment and furnishings..	20,479	9,915	7,722	6,933	6,654	6,657	6,667	9,114
Financial assets:								
Deposits and currency.....	23,612	6,703	4,058	3,375	3,296	3,507	3,876	6,688
U.S. savings bonds.....	3,155	1,538	1,126	1,095	1,195	1,346	1,574	1,576
Investments in cooperatives.....	41,003	10,198	4,823	2,558	1,467	942	717	8,247
Total.....	1,568,003	628,003	375,238	256,226	187,050	161,748	127,523	450,721
Per farm claims								
Liabilities:								
Real estate debt.....	140,699	75,118	25,859	15,339	7,766	4,144	6,667	38,040
Nonreal estate debt:								
Excluding CCC loans.....	173,282	33,462	15,430	8,844	5,636	4,114	2,497	32,311
CCC loans 3/.....	7,223	3,307	1,595	739	311	119	44	1,805
Total liabilities.....	321,204	111,887	42,884	24,922	13,713	8,377	9,208	72,156
Proprietors' equity.....	1,246,799	516,116	332,354	231,304	173,337	153,371	118,315	378,565
Total.....	1,568,003	628,003	375,238	256,226	187,050	161,748	127,523	450,721
<hr/>								
	Percent							
Debt-to-asset ratio.....	20.5	17.8	11.4	9.7	7.3	5.2	7.2	16.0

1/ Excluding horses, mules, and commercial broilers. 2/ All crops held on farms including crops under CCC and crops held off farms as security for CCC loans to farmers. 3/ Nonrecourse CCC loans secured by crops owned by farmers. These crops are included as assets in the balance sheet.

APPENDIX 3.

Typical Farms: Development,
Description, and Results

Appendix 3: Typical farms: Development, Description and Results

Development

A three step procedure was followed in developing the twenty typical farm descriptive data sets, four of which were used in this analysis: Illinois, Mississippi, Montana, and Kansas. First, relevant farm types and production regions were identified. Second, farm characteristics such as size, and the mix of crop and livestock enterprises were derived from Census data for each farm. The final step consisted of creating enterprise budgets for each of the enterprises and aggregating them into a whole farm budget.

Farm Types--In selecting of farm types and number of typical farms, a major consideration was given to farms growing crops covered by Federal commodity programs. A second objective in selecting farm types was to have a farm for each major commodity located in areas with different production technologies and cost structures. An example of this was the selection of cotton farms in California, Arizona, and Mississippi. The farms were always developed around a primary commodity. This commodity is the first one listed for each farm in table 3-1 .

The geographic locations of the typical farms were chosen using the 1974 Census of Agriculture rankings of counties by commodity (U.S. Dept. of Commerce). The location of a representative farm was established when five ranked counties fell within an area used for the USDA cost of production estimates (See the boundaries for these areas on the map in Figure 1). The Arizona cotton farm and the Montana wheat farm were the only exceptions to this rule. They were chosen even though they had fewer than five counties (due to large county sizes). The cost of production areas containing the USDA typical farms are shaded in Figure 3-1.

Farm Characteristics--Farm level respondent data from the 1978 Census of Agriculture were analyzed to determine the modal farm size and the most common enterprise mix. The respondent data from the five ranked counties were placed in separate files by Census personnel, and modal characteristics were estimated using the Census Typical Farm Program (CTFP), a system developed specifically for this task.

Cost Information Derivation--The last step in defining the twenty typical farms was to specify input and product prices and quantities, and to derive a specific machinery complement for each of the farms. The input and product prices are generally the same as those used in the research area enterprise budgets developed for the cost of production estimates, (USDA 1978).

Respondent data from the Cost of Production Survey were used to determine the machinery complements for the typical farms. Farm data from the State survey files were searched in an effort to identify farms of approximately the same size and having a similar crop mix to the farms defined with Census data.

Standard budgeting procedures were used to determine machine costs. A preliminary computer run was required to determine the hours of annual use for the machines on the typical farms. These hours were then used to compute the machinery costs specific to each of the farms.

Table 3-1. Description of the twenty USDA typical farms

Location	Acreage		Enterprise	
Arkansas	cropland	640	soybeans-irrigated	200
	total	720	soybeans-non-irrigated	180
			rice-irrigated	260
Arizona	cropland	760	cotton-irrigated	760
	total	910		
California	cropland	440	cotton-irrigated	440
	total	640		
California	cropland	0	milk cows	350
	total	20		
California	cropland	480	rice-irrigated	480
	total	680		
Georgia	cropland	520	peanuts	80
	total	720	soybeans	220
			corn	220
*Illinois	cropland	360	corn	180
	total	380	soybeans	180
Iowa	cropland	320	fed cattle	120
	total	360	corn	200
			soybeans	100
Iowa	cropland	240	pigs-litters	100
	total	300	corn	140
			soybeans	60
			oats	40
*Kansas	cropland	480	wheat	360
	total	580	alfalfa	80
			sorghum	40
			beef cows	15
			stockers	30
Louisiana	cropland	480	rice-irrigated	160
	total	520	soybeans-dryland	320
Minnesota	cropland	320	corn	160
	total	340	soybeans	160

----continued----

Table 3-1. Description of the twenty USDA typical farms, continued

Location	Acreage		Enterprise	
*Mississippi	cropland	1,040	cotton	480
	total	1,280	soybeans	160
*Montana	cropland	1,920	wheat	960
	total	2,140	fallow	960
Nebraska	cropland	480	sorghum	240
	total	560	wheat	120
			alfalfa	120
New York	cropland	160	milk cows	50
	total	300	alfalfa	30
			other hay	50
			corn	20
			corn silage	30
			pasture	30
North Dakota	cropland	760	wheat	320
	total	960	fallow	820
			barley	120
Texas	cropland	680	cotton	680
	total	780		
Washington	cropland	1,080	wheat	540
	total	1,280	fallow	540
Wisconsin	cropland	160	milk cows	45
	total	180	alfalfa	60
			green chop	20
			corn	30
			corn silage	30
			oats	20

*Farms used in this report.

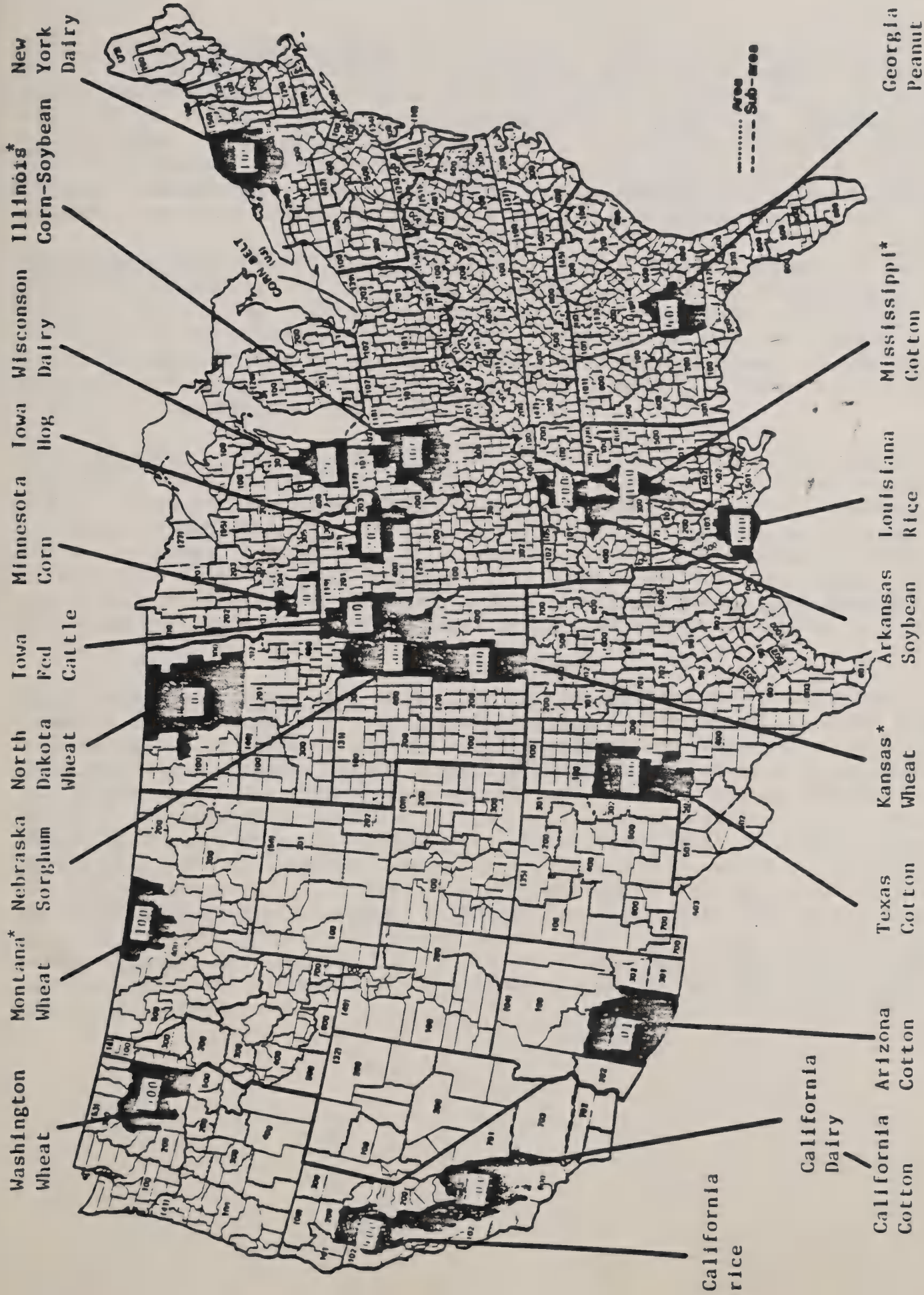


FIGURE 1. LOCATIONS OF THE TWENTY TYPICAL FARMS

* FARMS USED IN THIS REPORT.

Description of Farms

The Illinois corn-soybean farm is located in the east-central area of the State. The landbase is comprised of 360 acres of cropland (180 acres each of cotton and soybeans) and 20 acres of pasture/woodland/other land. The market value of all land and buildings is estimated to be \$1,007,228. Average yields in 1980 were: 79.1 bushels per planted acre of corn, and 35 bushels per planted acre of soybeans. Average prices received in 1980 were \$3.30 and \$7.70 per bushel, respectively. Labor is provided by the operator and seasonal part-time workers. Detailed results with 1980 prices and yields are shown in table 2-2.

The Montana winter wheat farm on fallow is located in the north-central area. The landbase consists of 1,920 acres of cropland (960 acres of wheat and 960 acres of fallow) and 220 acres of pasture/other. The market value of all land and buildings is estimated at \$1,021,143. The average price per bushel and yield per planted acre in 1980 were \$4.00 and 25.3 respectively. Farm labor is supplied by the operator and seasonal part-time help. The detailed results with 1980 price and yields are shown in table 3-3.

The Mississippi cotton-soybean farm is located in the Delta. The landbase consists of 1,040 acres of cropland (480 acres of cotton and 560 acres of soybeans) and 240 acres of pasture/woodland/other. The market value of all cropland and buildings is estimated at \$1,120,640. The average 1980 yields per planted acre and prices were: cotton lint, 501 pounds at \$.766 per pound; cotton seed, .39 tons at \$132.0 per ton; and soybeans, 15.4 bushels at \$7.75 per bushel. The labor was supplied by the operator, a full time hired worker, and seasonal part-time workers. The detailed results for 1980 yields and prices are shown in table 3-4.

The Kansas winter wheat farm is located in the south central area. The landbase consists of 480 acres of non-irrigated cropland (360 acres of wheat, 80 acres of alfalfa and 40 acres of grain sorghum) and 100 acres of pasture/other. The enterprise also supports a beef livestock enterprise consisting of 15 beef cows and 30 stockers. The market value of all land and buildings is \$356,118. The 1980 average yields of crops per planted acre and livestock were: winter wheat, 26.4 bushels; grain sorghum, 44.1 bushels; alfalfa, 2.85 tons; steer calves (8), 435 lbs.; heifer calves (4) 426 lbs., cull cows (2), 915 lbs.; and heavy feeders (29), 705 lbs. The 1980 average prices were: winter wheat, \$3.85 per bushel; grain sorghum, \$2.95 per bushel; alfalfa, \$60.50 per ton; steer calves, \$96.44 per cwt; heifer calves, \$85.74 per cwt.; cull cows, \$48.35 per cwt.; and heavy feeders, \$83.30 per cwt. Labor was supplied by the operator and seasonal part-time workers. The detailed results for 1980 prices and yields are shown in table 3-5.

Table 3-2 . Operating Statement for Representative Illinois Farms with 1980 Prices

	Full Owner (a)		Tenant (b)		Part Owner (c)	
	100% Equity	Minimum Equity	100% Equity	Minimum Equity	100% Equity	Minimum Equity
Cash Income						
Crop Receipts (net of share rent)	95,495	95,495	47,747	47,747	71,621	71,621
Cash Farm Expenses						
Seed	4,603	4,603	2,301	2,301	3,452	3,452
Fertilizer	13,254	13,254	6,627	6,627	9,941	9,941
Chemicals	5,227	5,227	2,614	2,614	3,920	3,920
Wages for hired labor	1,500	1,500	1,500	1,500	1,500	1,500
Fuel & Lube	5,517	5,517	5,517	5,517	5,517	5,517
Machinery Repairs	1,864	1,864	3,753	3,753	4,067	4,067
Machine Taxes	58	58	58	58	58	58
Other (grain drying)	1,864	1,864	932	932	1,398	1,398
Insurance	435	435	435	435	435	435
Int. on Operating Capital	-	2,574	-	2,575	-	2,574
Int. of Intermediate Debt	-	3,089	1,951(g)	1,951(g)	975	2,468
Int. of Real Estate	-	-	-	-	-	1,493
Debt - 11.3%	-	24,705	-	-	-	11,938
Principal payments on Debt (d)	-	1,697	-	-	3,193	820
Other Costs (e)	3,193	3,193	3,193	3,193	3,193	3,193
Total Cash Expenses	40,031	72,096	24,979	27,544	32,506	49,331
Net Cash Farm Income	55,464	23,399	22,768	20,203	39,115	22,290
Non Cash Expenses						
Depreciation	11,399	11,399	9,181	9,181	10,290	10,290
Total Net Farm Income	44,065	12,000	13,587	11,022	28,825	12,000
Allocations						
Family Labor	400	400	400	400	400	400
Operator Labor	4,104	4,104	4,104	4,104	4,104	4,104
Additional Family Living Allowance (f)	7,496	7,496	7,496	7,496	7,496	7,496
Total Allocations	12,000	12,000	12,000	12,000	12,000	12,000
Return to Equity	32,065	-0-	1,587	-978	16,825	-0-

a) Owns all assets

b) Rents all land but owns other assets

c) Owns half the land and 100 percent of other assets

d) Principal is 6.87 percent of interest on land debt

e) General farm overhead

f) To bring family labor & operator labor up to the \$12,000 minimum

g) Landlord pays this much of the interest on harvesting equipment

Table 3-3. Operating Statement for Representative Montana Farms with 1980 Prices

	Full Owner (a)		Tenant (b)		Part Owner (c)	
	100% Equity	Minimum Equity	100% Equity	Minimum Equity	100% Equity	Minimum Equity
Cash Income						
Crop Receipts (net of share rent)	97,152	97,152	64,768	64,768	80,960	80,960
Cash Farm Expenses						
Seed	3,477	97,152	64,768	64,768	80,960	80,960
Fertilizer	9,170	97,152	64,768	64,768	80,960	80,960
Chemicals	2,378	97,152	64,768	64,768	80,960	80,960
Wages for hired labor	1,370	97,152	64,768	64,768	80,960	80,960
Fuel & Lube	9,626	97,152	64,768	64,768	80,960	80,960
Machinery Repairs	11,447	97,152	64,768	64,768	80,960	80,960
Other Production Expenses	1,382	97,152	64,768	64,768	80,960	80,960
Insurance	733	733	733	733	733	733
Int. on Operating Capital	-	3,831	-	3,831	-	3,831
Int. on Intermediate Debt	-	1,833	-	-	-	-
Int. on Real Estate Debt	-	8,300	-	-	-	-
Principal payments on Debt (d)	-	566	-	-	-	-
Other Costs (e)	6,144	6,144	6,144	6,144	6,144	6,144
Total Cash Expenses	45,727	60,257	45,727	49,558	45,727	49,558
Net Cash Farm Income	51,425	36,895	19,041	15,210	35,233	31,402
Non Cash Expenses						
Depreciation	24,895	24,890	24,895	24,895	24,895	24,895
Total Net Farm Income	26,560	12,000	-5,854	-9,685	10,338	6,507
Allocations						
Family Labor	1,198	1,198	1,198	1,198	1,198	1,198
Operator Labor	3,772	3,772	3,772	3,772	3,772	3,772
Additional Family Living Allowance (f)	7,030	7,030	7,030	7,030	7,030	7,030
Total Allocations	12,000	12,000	12,000	12,000	12,000	12,000
Return to Equity	14,530	-0-	-17,854	-21,685	-1,662	-5,493

- a) Owns all assets
- b) Rents all land but owns other assets
- c) Owns half the land and 100 percent of other assets
- d) Principal is 6.87 percent of interest on land debt
- e) General farm overhead
- f) To bring family labor & operator labor up to the \$12,000 minimum.

Table 3-4. Operating Statement for Representative Mississippi Farms with 1980 Prices

	Full Owner(a)		Tenant (b)		Part Owner (c)	
	100% Equity	Minimum Equity	100% Equity	Minimum Equity	100% Equity	Minimum Equity
Cash Income						
Crop Receipts (net of share rent)	275,753	275,753	210,157	210,157	242,955	242,955
Cash Farm Expenses						
Seed	8,512	8,512	7,810	7,810	8,161	8,161
Fertilizer	13,335	13,335	10,271	10,271	11,803	11,803
Chemicals	53,668	53,668	53,668	53,668	53,668	53,668
Wages for hired labor	18,533	18,533	18,533	18,533	18,533	18,533
Fuel & Lube	21,275	21,275	21,275	21,275	21,275	21,275
Machinery Repairs	37,692	37,692	37,692	37,692	37,692	37,692
Custom Operations	2,415	2,415	2,415	2,415	2,415	2,415
Ginning	21,316	21,316	15,987	15,987	18,651	18,651
Other Production Expenses	9,838	9,838	9,838	9,838	9,838	9,838
Insurance	1,110	1,110	1,110	1,110	1,110	1,110
Int. on Operating Capital	-	7,210	-	7,210	-	7,210
Int. on Intermediate Debt	-	1,951	-	-	-	-
Int. on Real Estate Debt	-	5,945	-	-	-	-
Principal payments on Real Estate Debt (d)	-	408	-	-	-	-
Other Costs (e)	5,258	5,258	5,258	5,258	5,258	5,258
Total Cash Expenses	192,552	208,466	183,857	191,067	188,404	195,614
Net Cash Farm Income	83,201	67,287	26,295	+19,090	54,551	47,341
Non Cash Expenses						
Depreciation	55,286	55,286	55,286	55,286	55,286	55,286
Total Net Farm Income	27,915	12,000	-28,991	-36,201	-735	-7,945
Allocations						
Family Labor	2,155	2,155	2,155	2,155	2,155	2,155
Operator Labor	6,347	6,347	6,347	6,347	6,347	6,347
Additional Family Living Allowance (f)	3,498	3,498	3,498	3,498	3,498	3,498
Total Allocations	12,000	12,000	12,000	12,000	12,000	12,000
Return to Equity	15,915	-0-	-40,991	-48,201	-12,735	-19,945

a) Owns all assets

b) Rents all land but owns other assets

c) Owns half the land and 100 percent of other assets

d) Principal is 6.87 percent of interest on land debt

e) General farm overhead

f) To bring family labor & operator labor up to the \$12,000 minimum.

Table 3-5. Operating Statement for Representative Kansas Farms with 1980 Prices

	Full Owner(a)		Tenant (b)		Part Owner (c)	
	100% Equity	Minimum Equity	100% Equity	Minimum Equity	100% Equity	Minimum Equity
Cash Income						
Crop Receipts (net of share rent)	78,746	78,746	57,923	57,923	68,335	68,335
Cash Farm Expenses						
Seed	2,084	2,084	2,084	2,084	2,084	2,084
Fertilizer	5,612	5,612	4,294	4,294	4,953	4,953
Chemicals	689	689	689	689	689	689
Wages for hired labor	643	643	643	643	643	643
Fuel & Lube	5,659	5,659	5,659	5,659	5,659	5,659
Machinery Repairs	4,336	4,336	4,336	4,336	4,336	4,336
Other Production Expenses	22,129	22,129	22,129	22,129	22,129	22,129
Insurance	576	576	576	576	576	576
Int. on Operating Capital	-	2,244	-	2,244	-	2,244
Int. on Intermediate Debt	-	3,691	-	-	-	283
Int. on Real Estate Debt	-	6,178	-	-	-	238
Principal payments on Real Estate Debt (d)	-	420	-	-	-	16
Other Costs (e)	840	840	840	840	840	840
Total Cash Expenses	42,588	55,466	41,270	43,514	41,929	44,710
Net Cash Farm Income	36,158	23,625	16,653	14,409	26,406	23,625
Non Cash Expenses						
Depreciation	11,625	11,625	11,625	11,625	11,625	11,625
Total Net Farm Income	24,533	12,000	5,028	2,784	14,781	12,000
Allocations						
Family Labor	1,713	1,713	1,713	1,713	1,713	1,713
Operator Labor	5,411	5,411	5,411	5,411	5,411	5,411
Additional Family Living Allowance (f)	4,876	4,876	4,876	4,876	4,876	4,876
Total Allocations	12,000	12,000	12,000	12,000	12,000	12,000
Return to Equity	12,533	-0-	-6,972	-9,216	2,781	-0-

a) Owns all assets

b) Rents all land but owns other assets

c) Owns half the land and 100 percent of other assets

d) Principal is 6.87 percent of interest on land debt

e) General farm overhead

f) To bring family labor & operator labor up to the \$12,000 minimum.

APPENDIX 4.

Farm Growth Through Periodic

Refinancing of Assets

APPENDIX - FARM GROWTH
THROUGH PERIODIC REFINANCING OF ASSETS

With the rapid rise in land values over the past decade, some farmers undertook growth strategies that were uncomfortably similar to the disruptive pyramiding schemes widely practiced by some businesses during the first part of this century. The strategy is growth through leveraging of appreciating assets by periodically using the appreciation as the base for additional borrowing. When incomes in the farm sector or increases in asset values are above average, this strategy can earn phenomenal rates of return on equity, but when incomes are below average, losses can quickly bankrupt the operator.

The general procedure followed in using such a strategy on annual basis (its most extreme form) would be:

1. Purchase land with the minimum amount of equity required to qualify for the loan.
2. The operator farms it, and the residual return to land is computed at the end of the year, that is, the amount that remains after cash farm expenses have been paid and family living expenses met, along with an annual allowance for depreciation of farm assets.
3. During the year, land prices are expected to rise. Since the mortgage is for a fixed amount, the owner's equity would rise by an amount equal to the capital gains to land.

Since the owner's percentage equity at year-end would exceed the level required by the lending institution, the owner then seeks to refinance the mortgage to obtain cash for expansion and drop the equity proportion back down to the minimum level required. In other words, most of the capital gains to land would be monetized

within the year through refinancing (all except the proportion required as additional equity in the new loan). This money is then used to pay interest costs on the original loan and to finance additional land purchases.

The above procedure describes the effects in the first year of any farm expansion using maximum leverage on land assets. The risks in the first year are the same whether it is done every year, every few years, or once in a farmer's lifetime.

The implications of this analysis should be highlighted early in the discussion. The strategy for growth described here is a very high-risk strategy. Conditions favorable to its use are continuously high nominal residual returns to land and continued high nominal increases in land values. When farm incomes drop and increases in land values begin to level off, the means for refinancing the interest due on heavily indebted assets are no longer available to highly leveraged farmers and the likely outcomes are defaulting on contractual payments and, possibly, loss of the business.

The following equation can be used as a simplified framework to identify the important variables involved in this rapid growth strategy:

$$\text{Nominal return on equity} = \frac{X1 + X2 - X5(1-X4) - (1-X4)(1+X2)X3}{X4} * 100$$

where X1 = Nominal net residual income to land expressed as a proportion.

X2 = Returns to land from nominal capital gains, expressed as a proportion.

X3 = Costs incurred in refinancing, expressed as a proportion of the amount to be refinanced.

X4 = Minimum equity proportion required by a lending institution.

X5 = Interest rate on land.

To be successful, the nominal residual to land, X_1 , plus the nominal capital gains to land, X_2 must exceed the interest cost, $X_5(1-X_4)$, plus the refinancing cost, $(1-X_4)(1+X_2)X_3$.

Two examples, for 1979 and 1980 using the full owner Illinois farm will illustrate the two possible outcomes of this high growth strategy. The following assumptions are made for these two years:

		<u>1979</u>	<u>1980</u>
X_1 , Nominal net residual income to land	=	3.97%	3.20%
X_2 , Nominal capital gains return to land	=	8.6 %	4.7 %
X_3 , Refinancing costs	=	1.0 %	1.0 %
X_4 , Minimum equity required by lender	=	20 %	20 %
X_5 , Interest rate on real estate loans	=	10 %	11 %

1979 Conditions.

Inserting the 1979 values into the equation gives:

$$\text{Nominal return on equity} = \frac{.0397 + .0860 - .1(1-.20) - (1-.20)(1+.086)(.01)}{.20} * 100 = +18\%$$

In 1979, the Illinois farmer would have earned a rate of return on equity of 18 percent. Similar analyses for the years 1972 through 1979 would show even higher nominal rates of return to equity.

1980 Conditions.

Inserting the 1980 conditions in the equation gives:

$$\text{Nominal return on equity} = \frac{.032 + .047 - .11(1-.20) - (1-.20)(1+.047)(.01)}{.20} * 100 = -8.7\%$$

Under 1980 conditions, the Illinois farmer with maximum leverage would have run the risk of defaulting on the mortgage.

This analysis assumes farmers and lenders are confident that land prices will go up and they are willing to take high risks to expand their farms.

Most farmers, however, are not high-risk takers. They prefer instead to build their equity up to safe levels as witnessed by the greater than 80 percent equity level in farm assets for farms in all sales classes. Another assumption implicit in the analysis is that a lending institution would be willing to refinance a mortgage periodically so that a farmer could pursue such a rapid growth strategy. Lenders prefer to have the interest repaid each year and are wary of refinancing the interest due back into a new mortgage. To keep businesses operating, lenders sometimes have no choice but to refinance a farmer unable to make payments during years of relatively low income. But to pursue such a course with the obvious intent of pyramiding is unlikely, unless the rewards to the lender for taking the additional risks are relatively high. Consequently, the lender would be expected to increase its interest rates or refinancing charges. When a lender increases its interest charge due to a perceived increase in the riskiness of a loan, the risk faced by the farmer increases because the spread between the return items, X_1+X_2 , and the cost items, X_3+X_5 , decreases or may become increasingly negative occurred in 1980.

APPENDIX 5.

Selected Characteristics of Some Major
Farm Types by Regions

APPENDIX 5. PRODUCTION STRUCTURE OF U.S. AGRICULTURE

This appendix contains a brief detailed examination of production structure for four different types of farms in three different regions based on the 1978 Census of Agriculture:

- o Dairy farms in the Upper Midwest (Wisconsin and Minnesota),
- o Corn-soybean farms in the Cornbelt (western Ohio, Indiana, Illinois, Iowa, and eastern Nebraska),
- o Hog farms in the Cornbelt, and
- o Cotton farms in the Mississippi delta (Arkansas, Louisiana, and Mississippi).

Four farm types are inadequate to cover the range of agricultural diversity in the United States, but limitations of time and space require the restriction. The conclusions that can be drawn from the information contained here both support the previous statements about the general nature of agricultural structure, and reveal the variation in structure within the United States.

The farms upon which these descriptions are based were selected by sampling a transect of counties lying along the major axis of each region (see fig. 1). In the case of the Mississippi delta, which is smaller, more irregularly shaped, and has more sharply defined boundaries than the Midwest, two parallel transects were used, one on either side of the river — in order to secure a more representative sample.

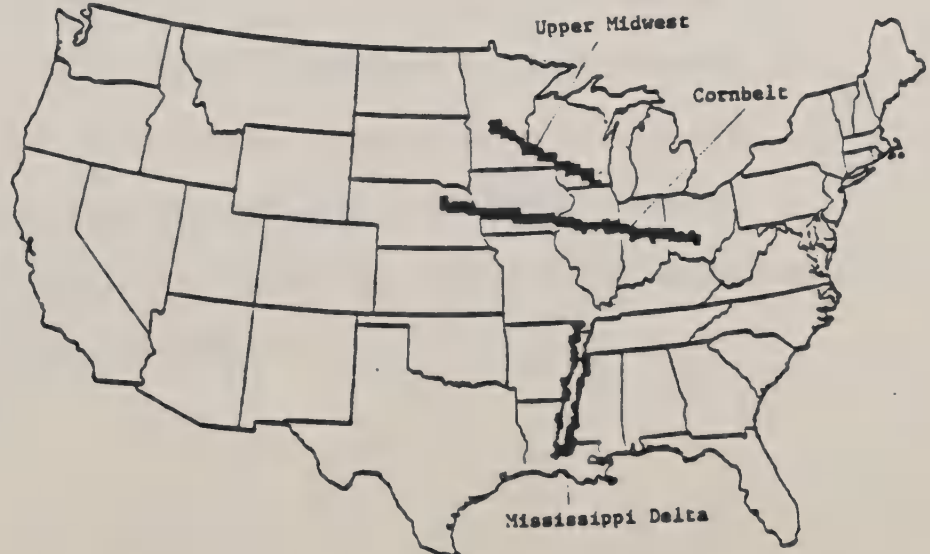


Figure 1. Transects of three U.S. farming regions

The 1978 Agricultural Census records for these samples of counties were accessed by means of the Census Typical Farms Program. Those farms which had 50 percent or more of all sales originating from the commodities of interest were sorted from the rest, and subsequently analyzed for their salient characteristics -- acres, crops, livestock, sales, age, tenure, form of business organization, and off-farm work. The 50 percent definition is the one employed by the Census in classifying farms by the Standard Industrial Classification (SIC).

The final stage of the analysis was to sort out a further subset of the farms, the modal group. This group of farms consisted of those SIC farms (dairy, for instance) whose constellation of characteristics (the relative proportion of dairy sales, cattle and calf sales, and crop sales in this case) were most frequently encountered. The modal group accounted for 13 to 33 percent of the SIC farms, and differed in a number of regards from the average of the SIC farms from which it was drawn. In all cases the modal group contained more farms than did the average group.

Dairy Farms in the Upper Midwest

The upper Midwest (Wisconsin-Minnesota) is a major dairy region of the country. A transect of this region was chosen which ran in a northwesterly-southeasterly direction, from Walworth County, Wisconsin to Stearns County, Minnesota. A total of 14 counties were encompassed in this transect, and 24,233 farms contained in the 14 counties. Several major cities were in the path of the transect: Janesville, Madison, and La Crosse, Wisconsin, and Minneapolis, St. Paul, and St. Cloud, Minnesota. The transect contained 12.6 percent of all the farms in the two states.

Table 1. Dairy farms, in the upper midwest transect and the region

A-38

Item	All farms in transect	Dairy farms in transect	Percent in dairy farms	
			In transect	In region
Farm numbers	24,233	8,935	36.9	30.7
Acres	4,924,245	2,281,818	46.3	32.2
Harvested acres	2,982,795	1,405,725	47.1	30.5
Sales <u>1/</u>	\$1,044	\$518	49.6	38.0
Dairy sales <u>1/</u>	\$436	\$398	91.3	91.8
Milk cows	406,766	365,997	90.0	89.8

1/ In millions.

As can be seen from table 1, dairy farms are more heavily represented in the upper midwest transect sample than in the region as a whole. More than one-third of the farms were dairy farms, nearly one-half of all farmland was in dairy farms, and virtually one-half of all sales came from dairy farms. These dairy farms are predominantly full-owner, sole proprietorships, with very little off-farm work (see table 2). The bulk of them are in the \$40,000 to \$100,000 sales class. More than 75 percent of their sales come from dairy products. A detailed graphic comparison of the five sales classes according to size and composition of sales, cropland, livestock, and land rental are presented in charts 1, 2, and 3, and figure 2.

The selection of the modal group was made on the basis of the composition of sales. Farms with more than 90 percent of their total sales coming from dairy products, less than 10 percent from cattle and calves, and 0 percent from crops was the combination most frequently encountered. The modal group was found to contain about 13 percent of the dairy farms. Compared to the entire sample of dairy farmers, these operators were younger, were more often full owners and sole proprietors, had fewer acres and sales, worked more days off farm, and relied almost entirely on dairy as the sole source of farm income (see table 2 and charts 1, 2, and 3).

Table 2. Dairy farms in the Upper Midwest: profiles and distributions

Farm subclass	Number of farms	Percent of all farms	Average farm			Percent of modal farms in the subclass
			Age	Acres	Total sales	Dairy sales as percent of total sales
Full owner	4,554	51.0	50	209	46,944	78.2
Part owner	3,564	39.9	47	318	73,095	75.8
Tenant	817	9.1	37	244	53,046	77.8
Sole proprietorship	7,536	84.3	47	242	53,897	77.6
Partnership	1,252	14.0	48	310	72,248	74.9
Corporation, family	122	1.4	49	529	154,246	73.5
Corporation, nonfamily	5	.1	37	383	70,000	77.1
Other	20	.2	44	377	92,400	74.0
Off farm work 1/						
0 days	6,628	78.6	48	263	60,873	77.0
1-99 days	1,006	11.9	45	261	57,500	76.0
100-199 days	251	3.0	44	195	40,602	78.8
200 days or more	543	6.4	47	189	34,323	78.4
Sales class						
\$0-9,999	281	3.1	53	102	6,637	77.2
\$10,000-19,999	853	9.5	53	137	15,430	78.4
\$20,000-39,999	2,424	27.1	49	190	30,265	79.7
\$40,000-99,999	4,350	48.7	46	270	62,936	77.8
\$100,000 or more	1,027	11.5	46	487	151,388	74.1
Modal group	1,167	13.1	47	214	47,995	90.9
All farms	8,935	100.0	48	255	57,934	77.0

1/ Approximately 2 percent of farms failed to report off-farm work; percent figured as percent of all farms reporting.

D = data not available because of disclosure rules.

NA = not applicable.

Wisconsin - Minnesota Dairy Farms

Chart 1

Average Sales per Farm by Sales Class
Dollars

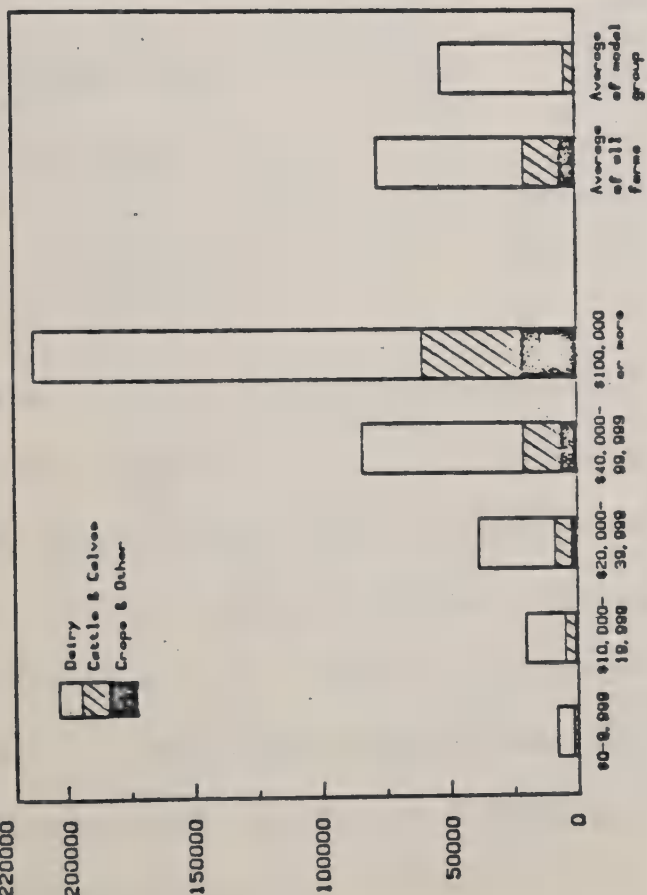


Chart 3

Average Herdsize per Farm by Sales Class
Livestock

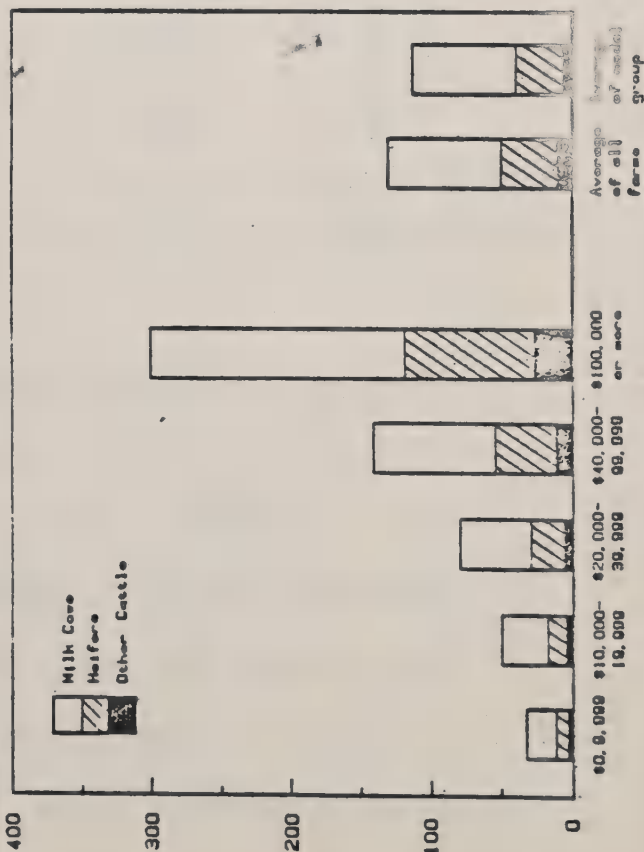


Chart 2

Average Harvested Cropland per Farm by Sales Class
Acres

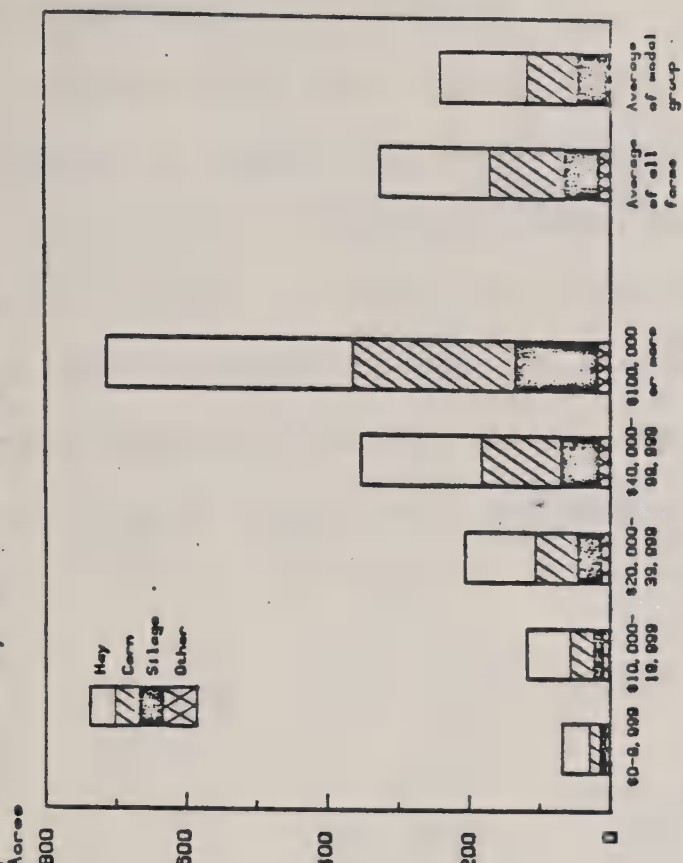
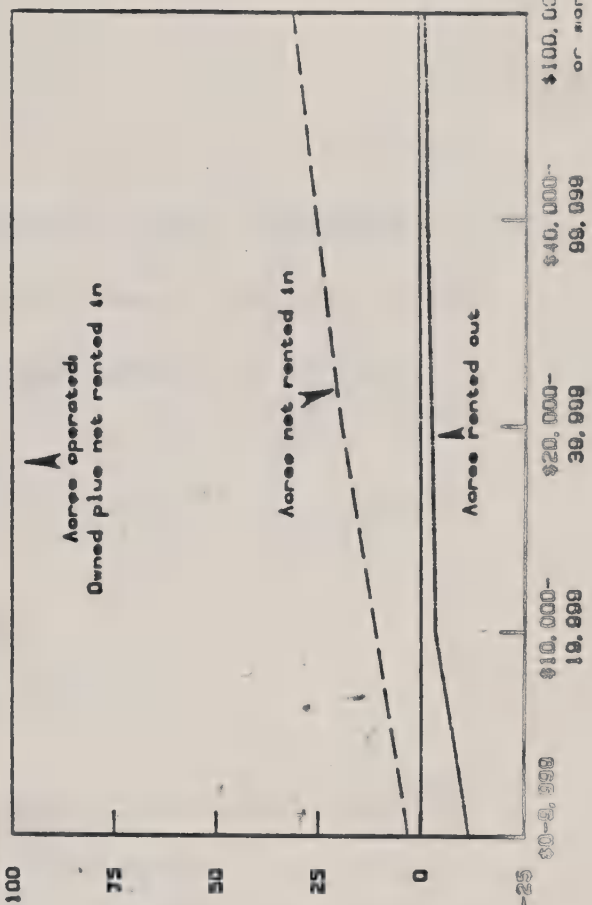


Fig. 2

Composition of Operated Acres by Sales Class
Percent

Percent



Corn-soybean Farms in the Cornbelt

The Cornbelt is a broad region, stretching from from central Ohio to eastern Nebraska. A transect was chosen which runs east to west through the heartland of the region, from Pickaway County, Ohio to Antelope County, Nebraska, encompassing in all 36 counties and 42,564 farms. The transect included several major cities -- Springfield, Ohio; Muncie, Anderson, and Lafayette, Indiana; Peoria and Galesburg, Illinois; and Des Moines, Iowa -- and passed within 25 miles of Columbus, Indianapolis, and Omaha. The transect contained 9.6 percent of all the farms in the region.

Table 3. Cash grain farms, in the transect and the region

Item	All farms in transect	Cash grain farms in transect <u>1/</u>	<u>Percent of cash grain farms</u>	
			In transect	In region
Farm numbers	42,564	24,457	57.5	51.9
Acres	11,601,196	7,306,132	63.0	61.0
Harvested acres	8,668,533	5,928,693	68.4	67.1
Corn-soybean acres	7,620,124	5,547,236	72.8	67.0
Sales <u>1/</u>	\$2,732	\$1,258	46.1	46.7
Cash grain sales <u>1/</u>	\$1,306	\$1,098	84.1	83.2

1/ Census information on farms classified by separate grain sales not available.

2/ In millions.

The sample is very representative of the region as a whole (see table 3). Cash grain farms 1/ (principally corn and soybeans; wheat and oats to a minor degree) accounted for over one-half of all farms, a higher proportion than in the region, and a slightly higher proportion of acres (total and harvested), sales (total and cash grain), and acreage devoted to corn and soybeans than the region. These corn-soybean farms are rather evenly split between full owner, part owner, and tenant (tenant to a lesser degree), and are predominantly sole proprietorship (see table 4). Sales volume is rather evenly spread among

1/ The Census does not collect sales information on the separate grains.

Table 4. Corn-soybean farms in the Midwest: profiles and distributions

Farm subclass	Average farm					Percent of modal farms in the subclass
	Number of farms	Percent of all farms	Age	Acres	Grain sales as percent of total sales	
Full owner	9,343	38.2	53	164	\$25,726	25.8
Part owner	9,037	37.0	48	450	81,124	42.4
Tenant	6,077	24.8	42	280	46,846	31.8
Sole proprietorship	20,930	85.6	49	281	47,531	85.1
Partnership	3,019	12.3	48	355	63,055	12.6
Corporation, family	374	1.5	50	803	164,845	1.8
Corporation, nonfamily	34	.2	53	734	168,235	0.0
Other	100	.4	47	272	55,860	.5
Off-farm work 1/						
0 days	11,230	48.6	53	391	69,889	55.9
1-99 days	3,822	16.5	45	359	60,216	19.6
100-199 day	1,629	7.1	43	216	34,646	7.1
200 days or more	6,435	27.8	37	130	19,360	17.4
Sales class						
\$0-9,999	5,156	21.1	48	58	5,438	NA
\$10,000-19,999	3,974	16.3	49	132	14,595	NA
\$20,000-39,999	4,954	20.2	50	222	29,053	NA
\$40,000-99,999	6,979	28.5	48	387	63,848	NA
\$100,000 or more	3,394	13.9	47	789	171,652	NA
Modal group	6,786	27.7	49	342	66,311	100.0
All farms	24,457	100.0	49	299	51,443	NA

1/ Approximately 5 percent of farms failed to report off-farm work; percent figured as percent of all farms reporting.

NA = not applicable.

Chart 5
Average Harvested Cropland
per Farm by Sales Class

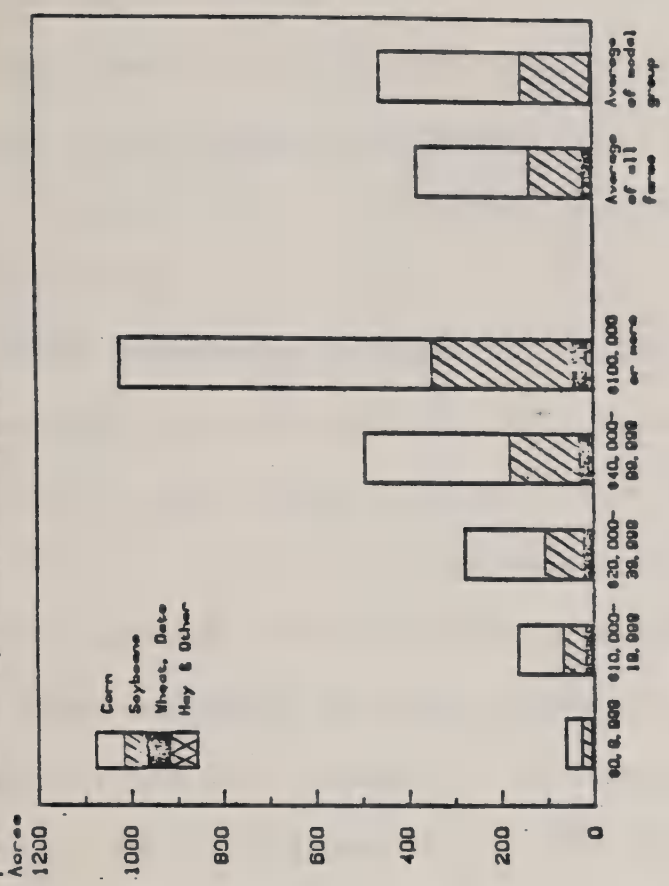


Fig. 3
Composition of Operated
Acres by Sales Class

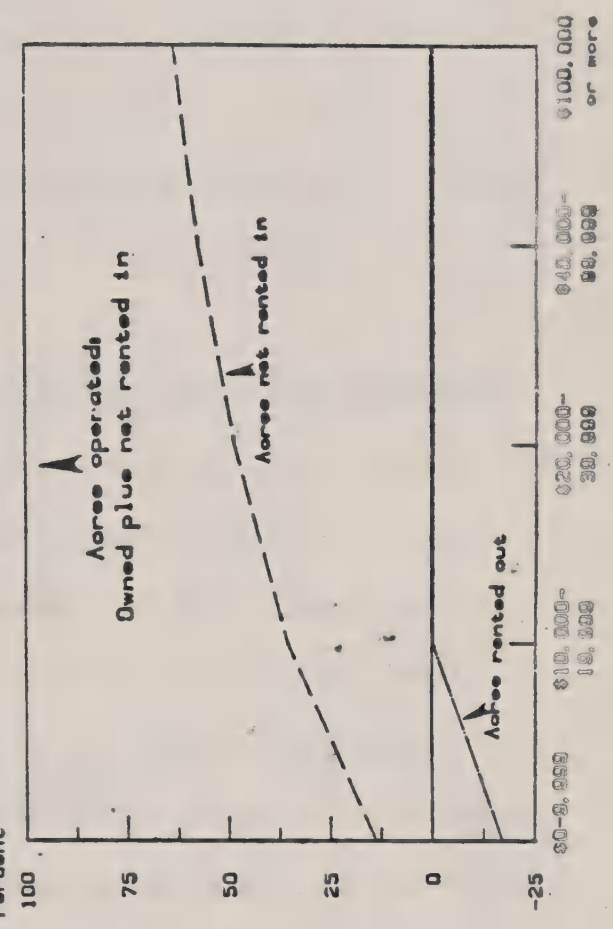


Chart 4
Average Sales per Farm by Sales Class

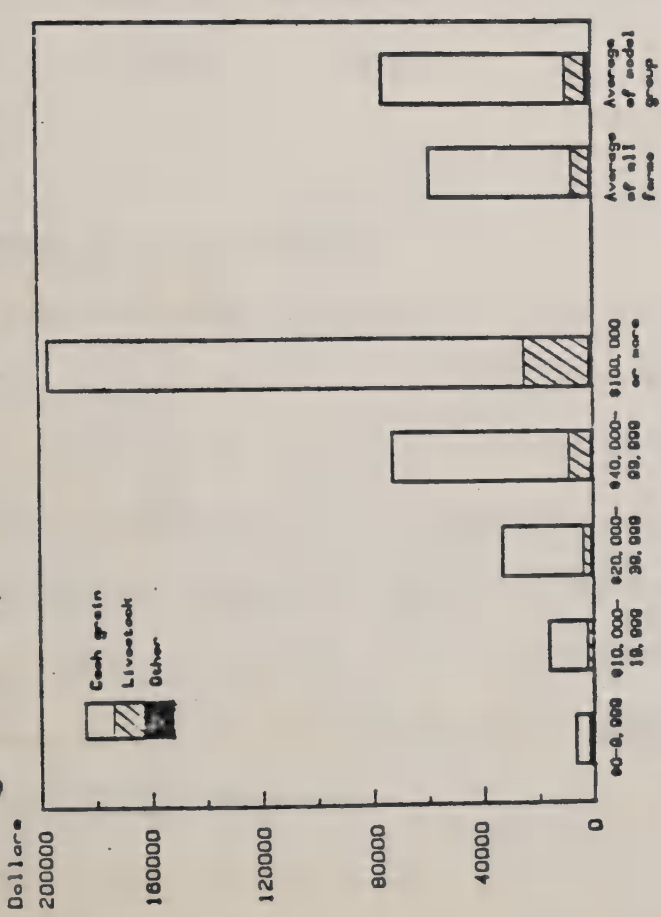
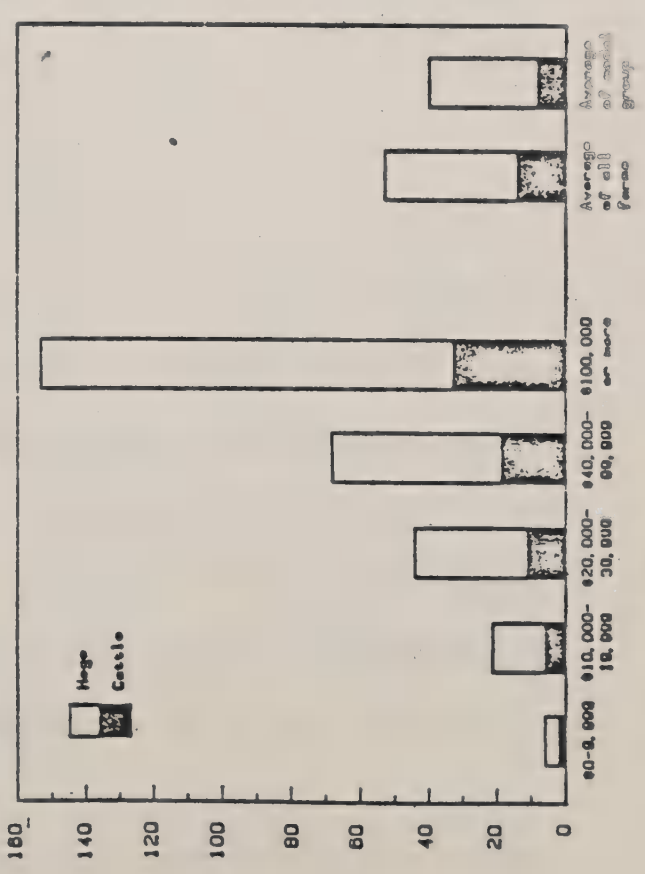


Chart 6
Average Herdsize per Farm by Sales Class



the five sales classes, but tends to fall in the midrange, \$20,000 to \$100,000. More than one-half of all corn-soybean farmers engage in off-farm work. A detailed graphic comparison of the sales classes according to size and composition of sales, cropland, livestock, and land rental is presented in charts 4, 5 and 6, and figure 3.

Since information on sales by separate grains is not available, selection of the modal group was made on the basis of the composition of crop acreage. Farms with a combination of 40 to 60 percent of their harvested acres in corn, 35 to 55 percent of their harvested acres in soybeans, and less than 5 percent of their harvested acres in haycrops were most frequently encountered. The modal group was found to contain about 28 percent of the cash grain farms. Compared to the entire sample of cash grain farmers, these operators were more often part owners and tenants, had more land and more gross sales, worked fewer days off-farm, and specialized to a greater extent in corn and soybeans (see table 4 and charts 4, 5 and 6).

Hog Farms in the Cornbelt

Besides being a primary producing region for corn and soybeans, the Midwest is a major producer of hogs. The transect counties of the five Cornbelt States pass through major (although not necessarily the maximum) concentrations of farm hog inventories. Unfortunately, the Census does not publish hog farms as a separate SIC farm type, making it impossible to compare the hog farm component of the transect with the hog farm component of the region. Presumably, the transect is fairly representative of Midwest hog farms, due to its size and location in the Cornbelt.

Hog farms are mostly full owner operations, are predominantly sole proprietorships, have sales in excess of \$40,000 in the majority of cases, and are

Table 5. Hog farms, in the transect

Item	All farms in transect	Hog farms in transect	Percent in hog farms	
			In transect	In region
Farm numbers	42,564	6,276	14.7	NA
Acres	11,601,196	1,370,202	11.8	NA
Harvested acres	8,668,533	937,919	10.8	NA
Sales <u>1/</u>	\$2,732	\$447	16.4	NA
Hog sales <u>1/</u>	\$518	\$332	64.1	NA
Hogs	3,775,936	2,298,103	60.9	NA

1/ In millions.

NA = not available.

about evenly split between some off-farm work and no off-farm work (see table 6). Approximately three-fourths of their sales come from hogs. The incidence of corporations is nearly twice that of dairy farms or corn-soybean farms. A detailed graphic comparison of the five sales classes according to size and composition of sales, cropland, livestock, and land rental is presented in charts 7, 8, and 9, and figure 5.

The selection of the modal group was made on the basis of the composition of sales. Farms with a combination of greater than 85 percent of sales from hogs, less than 5 percent from cash grain, and less than 5 percent from cattle were most frequently encountered. The modal group was found to contain about 26 percent of the hog farms. Compared to the entire sample of hog farmers, they were considerably younger (37 years, average age), operated many fewer acres, had 30 percent less gross sales of farm products and relied almost exclusively on hogs for farm income (see table 6 and charts 7, 8, and 9). Unlike the entire sample of hog farmers, who rented in approximately 88 percent more land than they rented out (which was 16 percent of total operated acres), the modal group rented in only 1 percent more than they rented out (22 percent).

Table 6. Hog farms in the Midwest: profiles and distributions

Farm subclass	Average farm					Percent of modal farms in the subclass
	Number of farms	Percent of all farms	Age	Acres	Hog sales as percent of total sales	
Full owner	3,238	51.6	47	120	\$48,570	80.7
Part owner	1,879	29.9	42	379	112,318	70.1
Tenant	1,159	18.5	38	232	67,964	73.1
Sole proprietorship	5,194	82.8	45	198	60,126	73.9
Partnership	890	14.2	45	286	96,539	74.0
Corporation, family	140	2.2	46	545	256,743	76.8
Corporation, nonfamily	34	.5	41	128	314,735	95.3
Other	18	.3	46	324	123,556	85.2
Off-farm work 1/						
0 days	3,164	53.4	48	299	98,056	73.9
1-99 days	828	13.9	42	248	72,662	74.6
100-199	294	5.0	40	120	40,459	76.5
200 days or more	1,641	27.7	40	63	25,010	81.9
Sales						
\$0-9,999	1,218	19.4	44	29	4,822	84.7
\$10,000-19,999	659	10.5	46	70	14,663	84.7
\$20,000-39,999	1,040	16.6	46	141	29,339	73.8
\$40,000-99,999	1,970	31.4	44	260	65,300	71.9
\$100,000 or more	1,389	22.1	44	454	196,108	75.2
Modal group	1,650	26.3	37	61	51,749	98.1
All farms	6,276	100.0	45	218	71,237	74.4

1/ Approximately 5 percent of farms failed to report off-farm work; percent figured as percent of all farms reporting.

NA = not applicable.

Chart 8
Average Harvested Cropland
per Farm by Sales Class

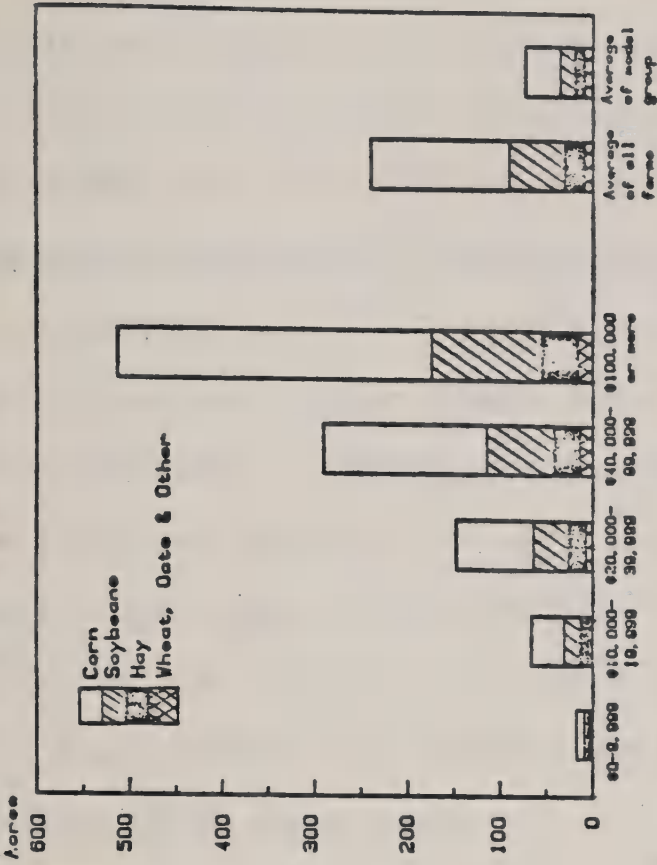


Fig. 4
Composition of Operated
Acres by Sales Class

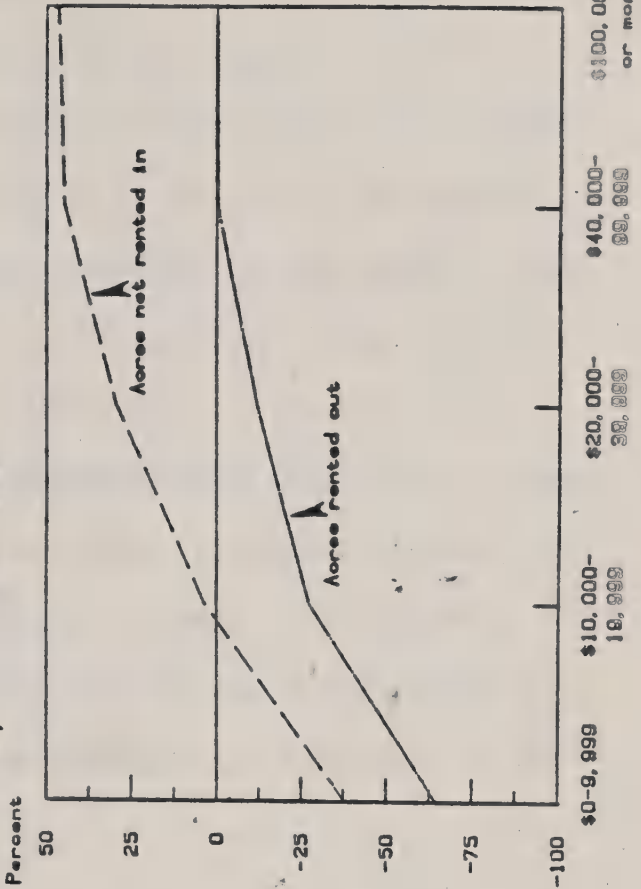


Chart 7
Average Sales per Farm by Sales Class

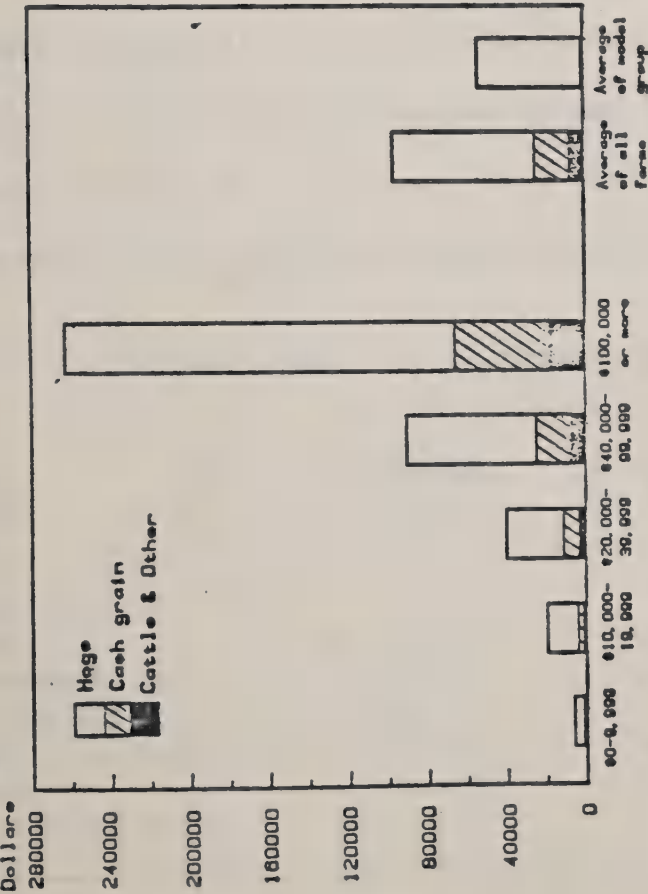
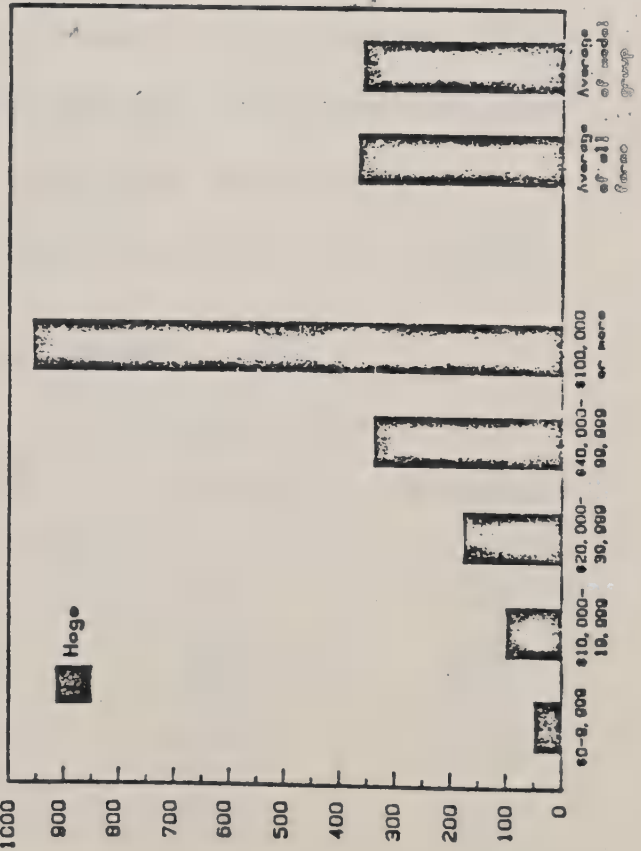


Chart 9
Average Herdsize per Farm by Sales Class



Cotton Farms in the Mississippi Delta

The Mississippi Delta, in the States of Arkansas, Mississippi, and Louisiana, is one of the major cotton producing regions of the country. Beause of the irregualr outline of the Delta, and the tendency of more cotton to be grown east of the river, and relatively more soybeans west of the river, a double transect was chosen which ran north-south roughly parallel to the river. The western transect ran from Clay County, Arkansas to St. Landry County, Louisiana; the eastern transect from De Soto County, Mississippi to Pointe Coupee County, Louisiana. Together the two transects encompassed 32 counties (16 counties each), and contained a total of 19,634 farms. The transects included several small cities -- Jonesboro and Forrest City, Arkansas, and Vicksburg and Natchez, Mississippi -- and passed within 25 miles of the major cities of Baton Rouge, Memphis, and Jackson. The transect contained 12.9 percent of all the farms in the three States.

Cotton production is much more important in the transect area than in the region in general (see table 7). Cotton farms are nearly four times as numerous; they contain almost one quarter of all harvested acreage, and account for more than a quarter of all sales. They are largely part owner operations, are predominantly sole proprietorships, and although farms are rather evenly spread

Table 7. Cotton farms, in the transects and the region

Item	All farms in transect	Cotton farms in transect	Percent in cotton farms	
			In transect	In region
Farm numbers	19,634	3,012	15.3	4.5
Acres	8,157,653	1,760,988	21.6	11.6
Harvested acres	4,799,641	1,383,969	23.9	17.9
Cotton acres	999,557	734,301	73.5	72.6
Soybean acres	3,935,064	603,576	15.3	12.2
Sales <u>1/</u>	\$1,100	\$299	27.2	13.8
Cotton sales <u>1/</u>	\$292	\$223	76.4	76.0

1/ In millions.

among the five sales classes, almost one-half of them have sales in excess of \$40,000 (see table 8). Nearly three-fourths of their total sales come from cotton. More than two-thirds of the operators do not work off the farm. A detailed graphic comparison of the five sales classes according to size and composition of sales, cropland harvested and and land rental is presented in charts 10, and 11, and figure 5.

The selection of the modal group was made on the basis of the composition of sales. Farms with a combination of 65 to 85 percent of sales from cotton, 15 to 35 percent of sales from cash grain (soybeans essentially), and less than 5 percent from cattle were most frequently encountered. This mix of commodity sales was used as the definition of the modal group, although the mix varied noticeably from north to south through the transects (soybeans were more prevalent in Arkansas and Mississippi than in Louisiana). The modal group was found to contain 33 percent of the cotton farms. Compared to the entire sample of cotton farmers, they were slightly younger, were more often tenants, operated larger acreages, had more gross sales of farm products and worked off farm slightly less (see table 8 and charts 10, and 11).

Table 8. Cotton farms in the Mississippi delta: profiles and distributions

Farm subclass	Average farm					Percent of modal farms in the subclass
	Number of farms	Percent of all farms	Age	Acres	Cotton sales as percent of total sales	
Full owner	784	26.0	56	504	92,841	24.6
Part owner	1,460	48.5	48	755	125,410	44.9
Tenant	768	25.5	42	343	56,238	30.4
Sole proprietorship	2,440	81.0	49	422	65,060	78.4
Partnership	394	13.1	48	1,144	212,210	15.3
Corporation, family	161	5.3	49	1,585	318,830	5.2
Corporation, nonfamily	17	.6	50	572	316,822	.6
Other						0.0
Off-farm work 1/						
0 days	1,894	67.4	50	707	121,550	68.3
1-99 days	317	11.3	43	532	93,326	10.0
100-199 days	190	6.8	47	435	64,756	6.7
200 days or more	409	14.6	46	207	33,017	15.0
Sales class						
\$0-9,999	701	23.3	53	55	4,960	NA
\$10,000-19,999	394	13.1	50	138	14,817	NA
\$20,000-39,999	447	14.8	48	257	29,159	NA
\$40,000-99,999	658	21.8	46	482	65,720	NA
\$100,000 or more	812	27.0	48	1,522	287,541	NA
Modal group	995	33.0	48	615	110,998	100.0
All farms	3,012	100.00	49	585	99,295	NA

1/ Approximately 7 percent of farms failed to report off-farm work; percent was figured as percent of all farms reporting.

NA = not applicable

Mississippi Delta Cotton Farm

Chart 10
Average Sales per Farm by Sales Class

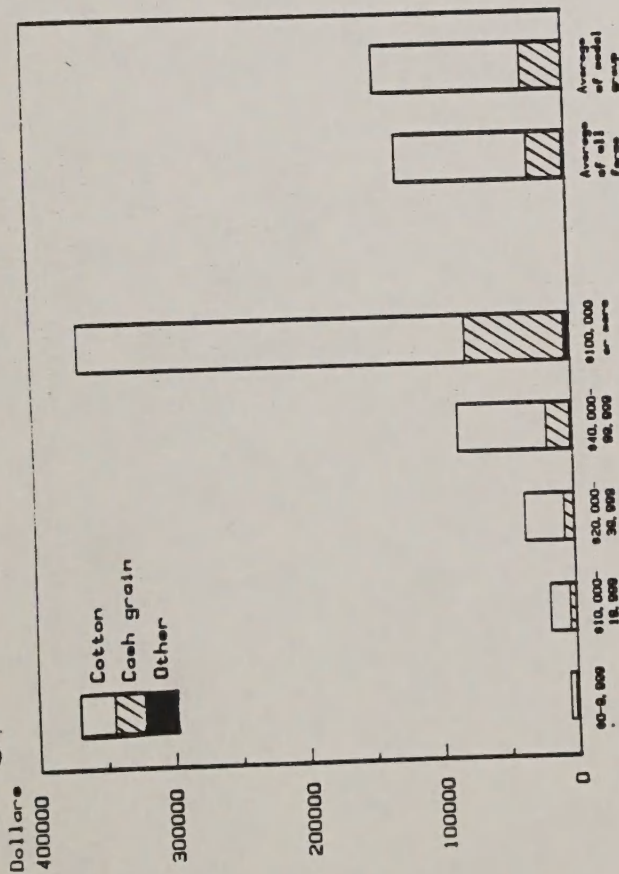


Chart 11
Average Harvested Cropland per Farm by Sales Class

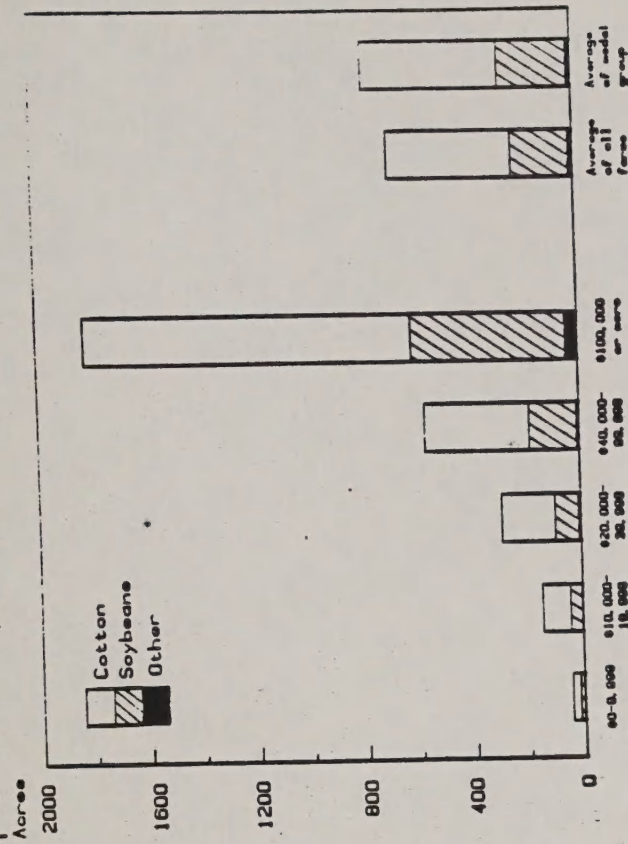
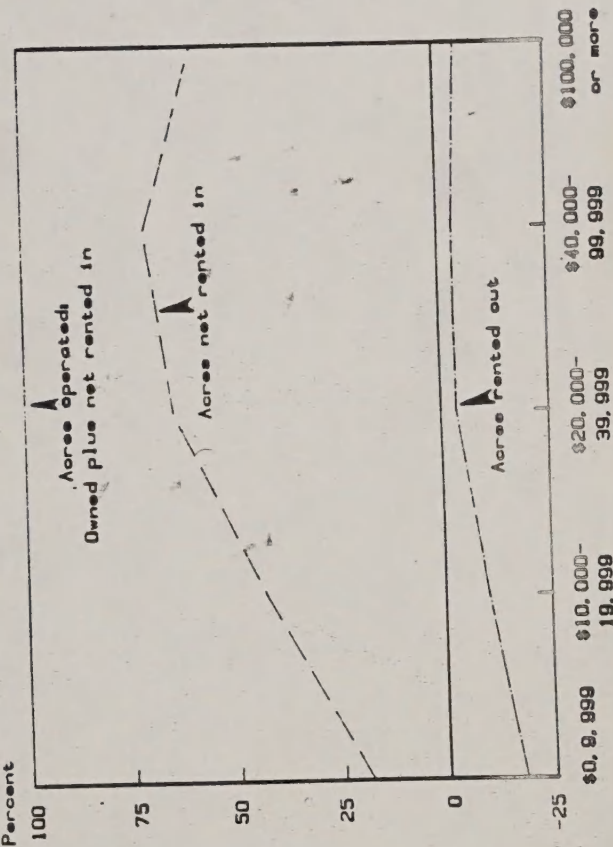


Fig. 5
Composition of Operated Acres by Sales Class



NATIONAL AGRICULTURAL LIBRARY



1022466641

NATIONAL AGRICULTURAL LIBRARY



1022466641